# Sixth Annual Economic Survey

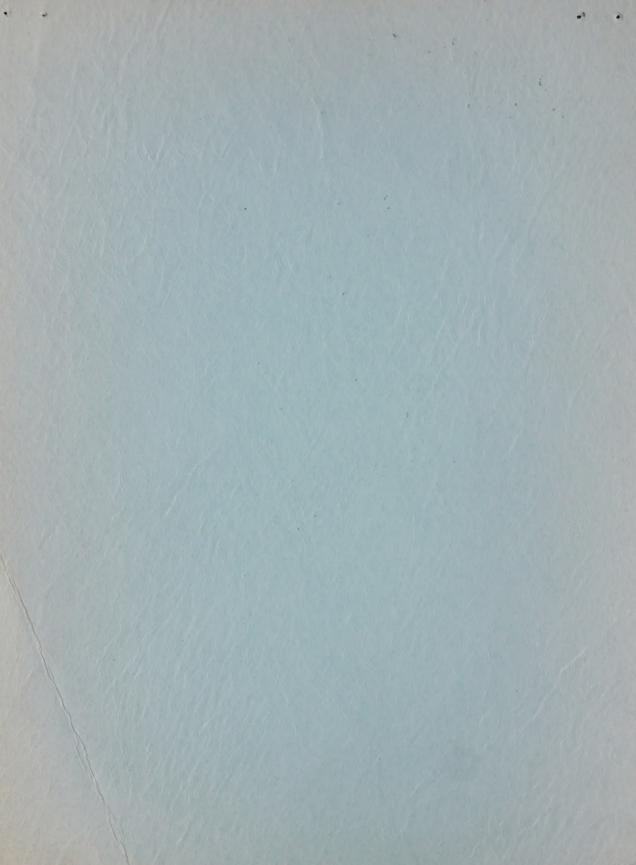
CAZØN ED -E17 of Ontario 1954



HON. LESLIE M. FROST, Q.C., LL,D. D.C.L.
Prime Minister and Provincial Treasurer



PROVINCE OF ONTARIO



# ERRATA

# Page

A 9 "

F - 98

C - 1	- Lines 5, 6, and 7 - sentence should read as follows: "Over the two year period it appears that only Prince Edward Island and Alberta had population increases proportionately greater than this Province".
	fifth and fourth lines from bottom of page - sentence should read as follows: "About a quarter of the Provincial total was in York County, whose population was more than four times as large as that of any other county in Ontario".
C - 3 and C - 4	- these pages are reversed. For page C-3 read C-4, and for page C-4 read C-3.
C - 9	- figure for estimated population of Sudbury should be rounded to read 41,930.
C - 18	- the urban-rural population distribution in this table is based on the definition used by the Dominion Bureau of Statistics in the 1951 Census - see footnote (1) on page C-2.
D - 3	- In the table "Trend Towards Urbanization in Ontario", 1931 and 1941 figures include only incorporated centres. The 1951 figures, following the new definition of urban used in the 1951 Census of Canada, include all centres of 1,000 and over whether incorporated or not.
F - 4	- figure shown in table for proportion Canadian exports of dairy products, eggs, and honey of total sales is 48.1% - change this to 4.8%.
F - 9	- the heading of the last column in this table was omitted - it should read "Fur-bearing Animals".

F - 51 and F - 52 - these pages have been reversed - for page F-51 read F-52, and

no longer required for radio receiving sets.

- paragraph six - note that as of March 31, 1953, licences are

for page F-52 read F-51.

# SIXTH ANNUAL ECONOMIC SURVEY OF ONTARIO 1954

# SUPPLEMENTARY ERRATA

# Page

I - 53

C - 10

- F 90 First sentence, second paragraph should read as follows:
  "While the number of passenger automobiles in Ontario has increased by 61 per cent. between 1941 and 1951....".
- H 2 Tax Levy, Revenue and Expenditure Per Capita figures should be shown with two decimal places. The nineteen regions and total should be corrected as shown in the examples following:

octar bhourd be corrected	CO DITOWIT II.	t one evenibr	CP TOTTOM TIPE.
	Tax	Per Capita	and that the tree day and that the gat the day and
	Levy \$	Revenue \$	Expenditure \$
Region 1 Metropolitan Region 13 Ottawa Valley Total		86.24 70.87 72.64	85.15 68.15 71.86
Under "Manufacturing" line	e six - for	1946 read 1	949.
For Region 2 - Burlington, 39.2 for 32.9.	, per cent.	change 1931	-1951 read

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# SIXTH ANNUAL ECONOMIC SURVEY OF ONTARIO 1954



PREPARED BY

THE ONTARIO BUREAU OF STATISTICS AND RESEARCH

DEPARTMENT OF THE PROVINCIAL TREASURER



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# INTRODUCTION

The Ontario Bureau of Statistics and Research takes pleasure in presenting its Sixth Annual Economic Survey of Ontario, authorized by the Honourable Leslie M. Frost, Prime Minister and Provincial Treasurer.

The purpose of this Survey is to present descriptive and analytical material relating to the economy of the Province of Ontario. Wherever possible, this information has been based, and presented, on the system of economic regions established about six years ago. An attempt has been made to assess the contribution of each region to the industrial life of the Province as a whole.

A number of new subjects have been introduced into this year's Survey and the coverage of other topics has been broadened and brought up to date. An intensive study of each of the economic regions has just recently been concluded by the Bureau, and the results are incorporated in this volume.

The Bureau wishes to extend its thanks to the many officials in the Ontario Government departments, commissions and boards who have co-operated so generously in providing information. The help and encouragement of officials of the Federal Government is gratefully acknowledged.

The Federal-Provincial Continuing Committee on Economic Statistics will meet this June, at which time the economic regions for each Province will be reviewed. A number of the plans have already received official approval from the Provinces concerned.

 $\,$  Any suggestions as to content or method of presentation of this volume will be welcomed by the Bureau.

This report has been prepared, under the direction of W.A. Campbell, M.A., by F.T. Denton, B.A., and Mrs. M.B. Levitt, M.A. The section on Municipal Finance was prepared under the supervision of Mrs. H.G. Rowan, C.P.A. The studies of the individual economic regions were supervised by P. Weale, B. Comm. All were ably assisted by the staff of the Bureau of Statistics and Research.

This volume was printed by the Department of Lands and Forests. Special thanks are extended to Mr. W.A. Herod of that department for his continued advice and co-operation.

H. J. Chater, C.P.A., F.S.S., Provincial Statistician.

May, 1954.

## ONTARTO ECONOMIC REGIONS EXPLANATION AND DEFINITION

The plan to divide the Province of Ontario into economic regions was conceived at the first Conference on Industrial Statistics convened by the Minister of Planning and Development in February, 1947. The normal political divisions of Ontario, consisting of forty-three counties and eleven districts, were deemed too numerous to make satisfactory statistical units. Larger areas would simplify the process of gathering and utilizing statistics.

The first such system in Ontario stems from an industrial zoning plan of the Province which was designed by the Canadian Manufacturers Association in 1940 and prepared in connection with a survey of industrial capacity. Officials of the Dominion Bureau of Statistics and the Economic Research Branch of the Department of Trade and Commerce were then consulted and they prepared tables and county-outline maps which detailed the location of industry, the urban-rural population ratios, the distribution of gainfully occupied persons according to major industrial groups, types of agricultural production, lines of communication, commuting areas, public project areas, and estimated market areas. Contiguous counties possessing similar economic structures were then combined and a system of nineteen economic regions evolved. The boundaries of these regions, with only two exceptions, were made to conform to existing county or district boundaries. The system was subsequently approved by the Ontario Cabinet and used by the Ontario Bureau of Statistics and Research as a basis for area distribution of statistical

The authors of the Ontario plan have not attempted to isolate a "distinctive economy" at the local level. It will be recognized at once that no particular system of zoning will satisfy all requirements. For some purposes, finer breakdowns are essential, for others combinations of regions may be more meaningful, and there are those for which some different area grouping plan is necessary. Nevertheless, "general purpose" regions have an important advantage in that a variety of statistical material is made available on a comparable area basis. Such a system can eventually be used to forecast local economic conditions and is generally useful to all persons concerned with analysing the structure of a particular part of the provincial economy.

Since the scheme was initiated, the Ontario Bureau of Statistics and Research has undertaken to study each of the regions in detail, in order to determine the chief types of economic activity in each and its relative importance in the Provincial economy as a whole. The regions were studied not only as units but as contiguous counties whose present grouping was subject to revision at a later date. As far as is known this is the first attempt to present descriptive information about different areas of the Province, and to try, to some extent, to analyse

# Region

1. Metropolitan

4. Lake Erie

5. Upper Thames

6. Border

7. St. Clair River

8. Upper Grand River

9. Blue Water 10. Kawartha

11. Quinte

12. Upper St. Lawrence

13. Ottawa Valley

14. Highlands

16. Nickel Range

17. Sault

18. Lakehead

Halton, Peel, York

Brant, Wentworth Lincoln, Welland Haldimand, Norfolk

Elgin, Middlesex, Oxford

Essex, Kent

Perth, Waterloo, Wellington

Bruce, Dufferin, Grey, Huron, Simcoe

Durham, Northumberland, Ontario, Peterborough, Victoria

Frontenac, Hastings, Lennox and Addington

Dundas, Glengarry, Grenville, Leeds, Stormont Carleton, Lanark, Prescott, Renfrew, Russell Haliburton, Muskoka, Nipissing, Parry Sound

Cochrane, Timiskaming Manitoulin, Sudbury

Algoma

Kenora, Rainy River, Thender Bay

Kenora-Patricia Portion

# ALPHABETICAL LISTING OF COUNTIES

## County

# Region

Algoma Brant Bruce Carleton Cochrane Dundas Durham Elgin Essex Frontenac Glengarry Grenville Grey Haldimand Halton Huron Kenora

Kenora-Patricia
Kent
Lambton

Lambton Lanark Leeds

Lennox and Addington Lincoln Manitoulin Middlesex Muskoka Nipissing Norfolk Northumberland Ontario Oxford Parry Sound

Perth
Peterborough
Prescott
Prince Edward
Rainy River
Renfrew
Russell
Simcoe
Stormont
Sudbury
Thunder Bay

Timiskaming Victoria Waterloo Welland Wellington Wentworth York Sault
Burlington
Blue Water
Ottawa Valley
Clay Belt
Blue Water
Upper St. Lawrence

Kawartha Upper Thames Border Quinte

Upper St. Lawrence Upper St. Lawrence

Blue Water Lake Erie Highlands Metropolitan Quinte Blue Water Lakehead James Bay Border

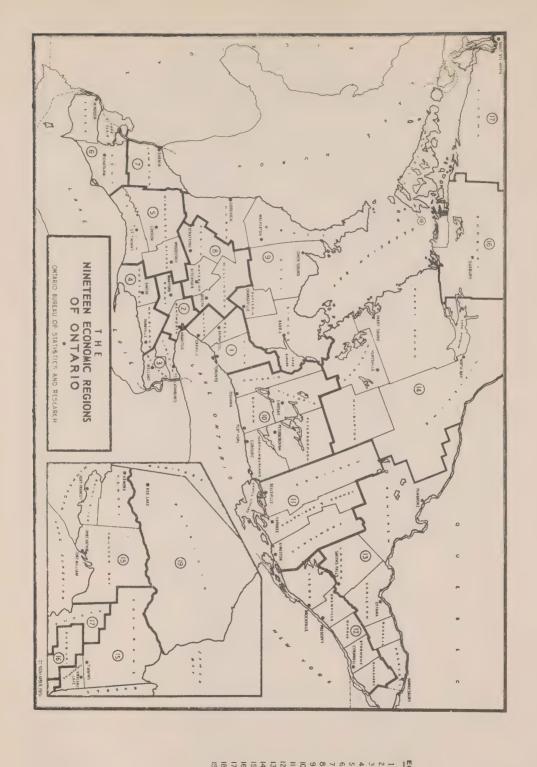
St. Clair River Ottawa Valley Upper St. Lawrence

Quinte
Niagara
Nickel Range
Upper Thames
Highlands
Highlands
Lake Erie
Kawartha
Kawartha
Upper Thames
Highlands
Metropolitan
Upper Grand Rive

Upper Grand River
Kawartha
Ottawa Valley
Quinte
Lakehead
Ottawa Valley
Ottawa Valley
Blue Water
Upper St. Lawrence
Nickel Range
Lakehead
Clay Belt

Kawartha Upper Grand River Niagara Upper Grand River

Upper Grand Riv Burlington Metropolitan



Upper St. Lawrence Ottawa Valley Highlands Clay Belt Nickel Range

Quinte Kawartha

Lakehead James Bay

# ECONOMIC REGIONS

Metropolitan Burlington

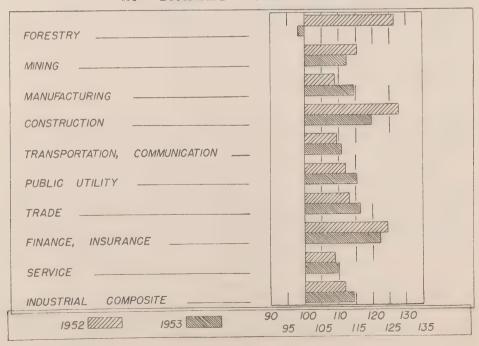
Niagera
Lake Erie
Upper Thames
Border
St. Clair River
Upper Grand River
Blue Water

# CENERAL ECONOMIC SURVEY OF 1953

The year 1953 was characterized by a continuation of the trend of increasing consumer expenditure in Canada, resulting, in the main, from higher industrial wages and an increasing volume of consumer credit. Purchases of consumer goods and services in 1953 increased five per cent. over the previous year. Canadian commodity exports, however, were down four per cent. over the same period. The market value of Canada's total production in 1953, as measured by the gross national product, was \$24,242 million, almost five per cent. above the 1952 figure. Since prices were relatively steady during the year, the changes reflect differences in volume. National income increased in about the same proportion, but wages and salaries, the largest component of national income, increased eight per cent. while corporate earnings declined moderately. In Ontario, industrial payrolls increased 8.4 per cent., employment only 2.5 per cent., and retail sales 5.2 per cent. This situation closely parallels that observed in the Canadian economy.

Primary industries in Ontario did not wholly participate in the increased activity enjoyed by secondary and tertiary industries during 1953. Farm cash income declined from \$715 million in 1952 to an estimated \$692 million in 1953. Prices of farm products dropped 10.5 per cent. during the period, but this was partly offset by increased production. In the mining industries, employment during 1953 declined 2.5 per cent. compared to the previous year. This was chiefly the result of the situation in the gold mining industry. In 1941 there were 71 producing gold mines in the Province, but by the end of 1953 there were only 34 survivors, including ten mines in the Porcupine area which were tied up in the latter part of the year by strikes. Nickel, iron, and most other mining industries, however, report increased production in 1953, and the development of uranium mines near Blind River may add substantially to Ontario's mineral output. Employment in logging and forestry during the year was 23 per cent. below 1952, but production and employment in these industries fluctuate considerably from year to year. Employment levels in 1953 were comparable to those of 1949 and 1950.

# INDEXES OF INDUSTRIAL EMPLOYMENT



The volume of manufacturing production rose an estimated 6.9 per cent. (Canada) during 1953 compared to the previous year, chiefly in response to an increased demand for durables. The production of durable goods increased 10.0 per cent. over the same period, while non-durable production increased 4.1 per cent., a characteristic which is reflected in the changing pattern of retail sales. Toward the end of the year, however, markets for farm implements and textiles weakened and lay-offs were prevalent in both industries. Production of motor vehicles, almost all of which are produced in Ontario, was 484,600 units in 1953, an increase of 12.3 per cent. above 1952. The transportation industry in Ontario, including aircraft, ship, automotive and rail equipment, employed 14.1 per cent. more persons in 1953 than in the previous year. Employment in the electrical apparatus and supplies industry increased 14.0 per cent. in the period, partially the result of increased television set production. An estimated 429,600 sets were manufactured in Canada in 1953.

Changes in the level of employment in various manufacturing industries have resulted in regional variations. Manufacturing employment in the Upper Thames, Metropolitan, and Kawartha Regions increased 7.8 per cent., 8.0 per cent., and 9.0 per cent. respectively. The Burlington and Clay Belt Regions recorded slight declines, the result in the former case of decreases in the farm implement and textile industries in Brantford and Hamilton, and in the latter case, of the indirect effects of the gold mine strikes.

The construction industry in Ontario was characterized by a high level of activity during 1953. Total construction contracts awarded reached \$850 million, chiefly as a result of increased residential building. A breakdown of construction contracts awarded in Ontario for the years 1952 and 1953 is shown below.

	1952	\$1 <u>953</u>	Percentage
	\$'000,000	\$1000,000	Change
Residential	226.8	328.7	44.9
Business	204.3	231.4	13.3
Industrial	119.5	140.0	17.2
Engineering	182.1	149.7	- 17.8
TOTAL	732.8	849.8	16.0

Source: MacLean Building Reports.

The emphasis on residential housing is reflected in the 35,173 new dwellings completed in the Province during the year, an increase of 7,712 units over 1952. Completions in Metropolitan Toronto dropped slightly from 9,576 to 9,460 in the same period.

Ontario's retail trade remained buoyant during 1953 with estimated retail sales of \$4,616 million, 5.2 per cent. above the total in 1952. Since there was little change in the level of retail prices during the year, the increase in the dollar value of sales is roughly indicative of a similar increase in the volume of goods sold. Two factors aided the upward trend in 1953, rising personal incomes and an increase in comsumer credit. The estimate of consumer credit outstanding (Canada) increased 30 per cent. from September 30, 1952 to the same date in 1953.

Increases in sales were not evenly divided among all trades. An emphasis on consumer durables was evident. Appliance and radio stores recorded an increase of 17.0 per cent. during 1953 compared to the preceding year, followed by lumber and building materials outlets (11.7 per cent.) and motor vehicle outlets (8.6 per cent.). Men's clothing store sales declined 4.9 per cent. during the same period. Motor vehicle outlets recorded the highest sales, \$842 million, during 1953. Grocery and combination stores followed with sales of \$816 million. Department store sales were \$342 million, 2.5 per cent. above the 1952 level.

## PHYSIOGRAPHY

Ontario, lying between  $42^{\circ}$  and  $57^{\circ}$  north latitude, has a total area of 412,582 square miles or 10.7 per cent. of the area of the Dominion. Of this total 88 per cent. (363,282 square miles) is land, while 12 per cent. (49,300 square miles) is fresh water. The Province stretches for 1,050 miles from the Great Lakes to Hudson Bay and 1,000 miles from the Quebec to the Manitoba boundary, with a southern shoreline of 2,362 miles. It is divided traditionally into two very unequal parts following the Mattawa River, Lake Nipissing and the French River. To the north of this line lie 360,000 square miles, while to the south there is an area of only about 50,000 square miles.

Most of the northern section and about one-third of the southern, is underlain by the Precambrian rock of the Canadian Shield. This area has little to offer agriculturally, but contains the mineral and forest wealth of the Province and is a valuable source both of developed and potential water power. The portion lying in Southern Ontario is famous for its many small lakes and its rocky terrain, and is a favourite tourist attraction.

Northern Ontario is in general, a land of low relief, its hills and ridges being no more than 100 to 200 feet above the adjacent lakes and valleys. In detail however, the topography is quite irregular. South and west of Hudson Bay and James Bay there is a low flat plain sloping up from the water with a gradient of about three to four feet per mile. The Shield is more elevated than this plain, being generally over 1,000 feet above sea level, but sloping slightly downward toward the north from the water divide which is not far from its southern edge. At the divide, the elevation reaches about 1,500 feet, but nearer the shores of Lake Superior isolated hils rise several hundred feet higher. Situated in the Sault Region, on the eastern shore of the Lake, is Mount Batchawana (2,125 feet), the highest point in Ontario. The Shield has an abundance of lakes, though the number of these tends to diminish toward the north, their place being taken by more and larger muskegs. There are also large areas of bare rock or of shallow covering over rock, and deep, coarse sand plains, all of which are too dry for normal soil development.

The areas surrounding Hudson Bay and James Bay, near Lake Timiskaming and in the Manitoulin Islands are underlain by rocks younger than those under the Shield. Here may be found some twenty million acres of clay soil mixed with some sand. The best lands in this clay belt, and the only ones which can be farmed economically, lie near the large streams, as farther inland a deep layer of peat covers the fertile soil. Within the clay belt there are various areas of sandy materials which have better internal drainage than the clay. On these, mineral soil with a fair admixture of organic matter has developed. Such soils are particularly suitable for special agricultural purposes, such as the growing of potatoes.

Southern Ontario, except for the Precambrian rock area of the Canadian Shield, is underlain by limestone and shale. Level sand and clay plains cover nearly half of the area so that the topography is generally one of low relief except for the Niagara Escarpment and several short but sharp faults in the Ottawa Valley. The Niagara Escarpment after giving rise to Niagara Falls, extends north to the tip of Bruce Peninsula, a distance of 250 miles. The highest and most picturesque part of this area is found at the southern end of Georgian Bay near Collingwood. Here the land reaches a height of 1,775 feet, or almost 1,100 feet above the waters of Georgian Bay. Thus, in the Blue Water Region, is found the highest point in Southern Ontario. Behind the brow of the Escarpment lies a belt of limestone from which the overburden was removed by glaciers. A similar limestone plain extends in a broad belt from Kingston to Ottawa. A second upland area is found in Algonquin Park, which is part of the Canadian Shield. Here the land rises to an elevation of about 1,600 feet above sea level.

In Southern Ontario there are two main agricultural regions. The largest and most important of these lies south and west of the Canadian Shield, in what is also the most populated and industrialized section of the Province. This area is sharply divided by the Niagara Escarpment. To the west, approximately 17,000 square miles of land devoted primarily to agriculture, slope gradually from the rolling stony uplands near Georgian Bay, to the flat plains on the

shores of Lake Huron and Lake Erie. The 6,500 square mile area of land east of the Escarpment, is generally lower but reaches an elevation of between 1,000 and 1,300 feet above sea level in the height of land which extends for 120 miles from the Caledon mountain. The land slopes gently from this area and eventually drains into Lake Ontario.

All types of soil are found in the inland area of this section of the Province -- gravelly knolls, light clay and sandy soils, and heavy clay in the depressions -- ideal for general farming and the raising of livestock. Along the Great Lakes the soils are not so varied, being primarily deep rich clay and sandy loam. The centre half of the shore area of Lake Erie, especially Norfolk county, has light productive sandy soil, famous for flue-cured tobacco and fruits. East of the Escarpment, fertile soils extend inland as far north as Georgian Bay.

The second agricultural area, containing 6,000 square miles, lies between the St. Lawrence River and the Ottawa River. The soil is similar to that found inland west of the Shield but a smaller percentage of the total land area is suitable for agriculture. General farming, with particular emphasis on the raising of livestock, is carried on in this section of the Province.

### CLIMATE

About 82 per cent. of Ontario lies south of the northern limit of agricultural growth. With less than six months of growing temperatures, (above a mean of  $42^{\rm O}{\rm F}$ ), the variety of crops which may be grown is strictly limited. With a growing season of less than five months most agriculture is very difficult, if not impossible. The July isotherm of  $60^{\rm O}{\rm F}$  mean temperature marks the northern limit of both successful agriculture and commercial forests.

The presence of the Great Lakes exerts considerable influence on the climate of Southern Ontario. It modifies the winters of the lands along its vast shoreline, and puts additional moisture into the atmosphere of these same areas during the summer. The climate of the Niagara Peninsula is further modified by the Niagara Escarpment which shelters the shoreline from the drying and cooling effects of the prevailing west winds thus providing excellent conditions for fruit growing. Winters in Southern Ontario are coldest on the ridges between Lake Huron and Lake Ontario, and in the highlands east of Georgian Bay and between the St. Lawrence and the Ottawa Rivers. At this time of year a steep north-south gradient of about 1°F for every 20 to 25 miles is very evident. The winter isotherms follow closely the outline of the shores of the Great Lakes. But there are, in addition, two cold loops over the two upland regions. These cold loops are most pronounced in the spring, at which time a cooling effect is also noticeable along the shores of Lake Erie and Lake Huron. In the fall the inland areas cool more rapidly than the lake shores. The Georgian Bay region, the Niagara Peninsula and the western end of Lake Erie are noted for prolonged mild autumns. The frost-free period varies from 179 days at Pelee Island in the extreme southwest, to less than 100 days in Algonquin Park. Pelee Island is the warmest spot in Ontario with a July average of 74°F.

In Northern Ontario the number of frost-free days ranges from 125 at North Bay to 60 near the shores of Hudson Bay, while July temperatures vary from an average of  $66^{\circ}$ F at North Bay to  $56^{\circ}$ F at Hudson Bay. In January there is a fairly uniform gradient from south to north, from a mean of  $10^{\circ}$ F at North Bay to a mean of  $-15^{\circ}$ F near the shore of Hudson Bay. Lake Superior tends to raise the temperature slightly along its shoreline, but its influence does not extend far inland. In the summer, polar air flows over the cold waters of Hudson Bay without being appreciably modified, and then settles down into the various valleys and depressions. For agriculture to be reasonably successful, therefore, it must be possible for the cold air to drain to lower levels away from the arable land. The most successful attempts at farming have been in the area of Lake Timiskaming and the continuation of this valley northward to Cochrane.

### PRECIPITATION

Mean annual precipitation in Southern Ontario varies from 26" to 40" and is fairly uniformly distributed throughout the year, with no pronounced wet or dry season. Rainfall is somewhat lighter over the lakes than over the areas  $\frac{1}{2}$ 

sloping up from the shores. Pelee Island, the Niagara Peninsula and Prince Edward county, illustrate this tendency. The heaviest precipitation occurs on the west slopes of the uplands facing Lake Huron and Georgian Bay, while "rain shadows" or drier areas are found to the east. The extreme eastern part of the Province is also an area of heavy precipitation. A belt of heavy snowfall extends through southwestern Ontario from London to Owen Sound and crosses Georgian Bay into Muskoka and Parry Sound. Both Owen Sound and Parry Sound average more than ten feet of snow per winter. The distribution of snowfall is similar to that of total precipitation.

In Northern Ontario, precipitation varies from about 30" a year at Sudbury to 15" on the shores of Hudson Bay. More than half the precipitation occurs in the warm season, the maximum in the west coming in mid-summer, while in the east it comes in late summer and fall. Most of the inhabited part of Northern Ontario gets from 80 to 100 inches of snow each year, while the northern part, in general, receives less than 60 inches. The wettest district in Ontario is found along the high slopes to the east of Lake Superior, while the least moisture is received in the far north.

### CONSERVATION

Interest in conservation in Southern Ontario appeared first in the field of reforestation and woodlot management, but later expanded to include flood and pollution control, improved land use and provision for recreation facilities. The Conservation Branch of the Department of Planning and Development was established in 1944 to organize conservation work in Southern Ontario on the basis of drainage basins. All the municipalities in the basins were to be equal partners. Since the passing of the Conservation Authorities Act early in 1946, fifteen Authorities have been organized, covering an area of 10,505 square miles and including 256 municipalities.

Flood control is the most important problem faced by the Authorities and it was to solve this problem that the majority were established. Flood control measures totalling \$1,951,178, have been completed or are in progress in three Authorities. The Ontario Government is contributing 75 per cent. of the cost, while the municipalities within the Authority concerned pay 25 per cent. Other dams and reservoirs to a total of \$10,571,623 are being built by two other Authorities. The Canadian Government is paying  $37\frac{1}{2}$  per cent., the Ontario Government  $37\frac{1}{2}$  per cent., and the Authority concerned 25 per cent., of the cost of these projects.

In addition to the above measures which have been completed or are now under way, surveys and plans up to the construction stage have been completed for nineteen projects which would cost \$10,740,000 to construct, and preliminary field surveys have been completed for twenty-eight projects which would cost \$31,590,000.

The Authorities are also interested in other conservation schemes such as improved methods of land use, reforestation, proper woodlot management, prevention of pollution, investigation of underground water supplies, wildlife studies and recreation. But they are not equipped to carry out the extensive investigations necessary to find out where such work should be done. The Conservation Branch, therefore, added to its staff a small group of technicians to appraise the conservation needs of each watershed and present to the Authority involved a comprehensive program for the solution of its problems. The survey work is grouped under five general headings: Land Use, Forestry, Hydraulics, Wildlife and Recreation. In addition, a study of the history of the area is included. All survey work begins with aerial photography.

The results of the surveys together with recommendations based on them are presented to the Authorities. The Authority, then, assumes the responsibility of initiating any schemes it considers urgent, and approaches the government departments or other bodies from which it wants assistance. Before any project can be proceeded with, approval must be given by three Ministers - the Ministers of Planning and Development, Lands and Forests and Public Works.

There is no system of Conservation Authorities in Northern Ontario. A co-operative effort to conserve and increase productivity of forest lands, however, has been undertaken in the Lakehead area by departments of the Ontario and Federal Governments, the faculty of forestry of the University of Toronto, and two private pulp and paper companies. As work proceeds, other pulp and paper companies operating in that area will be given an opportunity to participate.

Responsibility for planning and carrying out the program is in the hands of a steering committee which represents all the co-operating agencies. Planning and organization have been in progress for more than a year, and it is expected that work and study will continue over a considerable period.

Over most of the forest limits annual growth exceeds annual cut. Similarly, in Canada as a whole, forest growth is generally sufficient to replace consumption. But in certain areas conifers, particularly spruce, have not reproduced themselves adequately. As a good supply of spruce is of vital importance to the pulp and paper industry, companies wish to learn how this situation can be improved.

The governments maintain research organizations staffed with specialists in every sphere of forestry, but cannot, of course, conduct extensive logging operations. The pulp and paper industry, on the other hand, has all the practical facilities but cannot maintain extensive research staffs. These two are now co-operating so that the talents of the governments' research staffs are being applied directly to practical problems on the operating sites of the industry rather than on a variety of distant stations where conditions may differ considerably from those in the problem area.

It is to be hoped that such co-operation will continue in the future and spread to other aspects of conservation.

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Conservation Authority	Counties Concerned	Area Sq. Miles
Ausable River	Huron, Lambton, Middlesex, Perth	665
Big Creek Valley	Brant, Norfolk, Oxford	282
Catfish Creek	Elgin, Oxford	153
Don Valley	York	141
Etobicoke-Mimico	Peel, York	112
Ganaraska River	Durham, Northumberland	105
Grand Valley	Brant, Dufferin, Grey, Haldimand, Halton Norfolk, Oxford, Perth, Waterloo, Welling Wentworth	gton, 2,614
Upper Holland Valley	York	93
Humber Valley	Dufferin, Peel, Simcoe, York	337
Middle Maitland Valley	Huron, Perth, Wellington	, 257
Moira River	Hastings, Lennox and Addington	1,056
Napanee Valley	Frontenac, Lennox and Addington	307
Saugeen Valley	Bruce, Grey, Huron, Wellington	1,546
South Nation River	Carleton, Dundas, Glengarry, Grenville Leeds, Prescott, Russell, Stormont	1,512
Upper Thames River	Middlesex, Oxford, Perth	1,325 10,505

## POPULATION

The Dominion Bureau of Statistics estimates that the population of Ontario was 4,897,000 at June 1, 1953. This figure represents a numerical increase since the 1951 Census of 299,000, or 6.5 per cent. Of the total two-year increase, 168,000 is attributed to the year ended June 1, 1952, and the balance of 131,000 to the year ended June 1, 1953. Over the two year period it appears that only Prince Edward Island and Alberta had population increases greater than this Province. Ontario's numerical two-year increase was the largest of any province, Quebec following with 213,000.

During the intercensal period 1941-51, a period of general population growth in Canada, Ontario added 810,000 people to her population, or 21.4 per cent. This was the largest numerical increase of any province, although percentagewise both British Columbia and Quebec surpassed Ontario with 42.5 per cent. and 21.7 per cent. respectively. In the United States only ten states showed percentage advances in excess of Ontario (California -53.3; Arizona - 50.1; Florida - 46.1; Nevada - 45.2; Oregon - 39.6; Washington - 37.0; Maryland - 28.6; New Mexico - 28.1; Utah - 25.2; Virginia - 23.9). Canada as a whole, added 2,141,000 people to her population through natural increase and migration, and another 361,000 through the entrance of Newfoundland into Confederation. The Canadian population thus advanced by 21.8 per cent. all told.

Historically, Ontario has never recorded an intercensal increase as great both numerically and percentagewise as that of the recent decade. The intercensal percentage increases from 1871-81 to 1941-51 are recorded below:

# % Increase in Population of Ontario

1871	-	1881	18.9	)
1881	400	1891	9.7	
1891	-	1901	3.2	
1901	-	1911	15.8	
1911	_	1921	. 16.1	
1921	-	1931	17.0	
1931	***	1941	10.4	
1941	-	1951	21.4	

Of the total population of Canada, Ontario accounted for 32.8 per cent. at the 1951 Census. This was roughly the same as the proportion ten years earlier. However, excluding Newfoundland, the proportion was 33.7 per cent., an increase over the 32.9 per cent. enumerated in Ontario at the 1941 Census. The increase in the ratio of Ontario population to total Canadian population represented a reversal of the 1901-1941 trend. The following table illustrates this:

# % Ontario Population of Canadian Population

1901			40.6
1911			35.1
1921			33.4
1931			33.1
1941			32.9
1951	(excluding	Newfoundland)	33.7
1951	(including	Newfoundland)	32.8

The population of Ontario is concentrated in the southern part of the Province, and particularly in certain highly urbanized sections of the south. In 1951, 87 per cent. of the Provincial population was located in Regions 1 to  $1^{l_{\rm H}}$  (see map on p.iv). About a quarter of the Provincial total was in York County, whose population was more than six times as large as that of any other county in Ontario. The bulk of the county population was in the Toronto area. The Metropolitan Region, by virtue of its inclusion of the Toronto area, was the most populous with 27.8 per cent. of the total. The Burlington Region was second in this respect.

With regard to intercensal growth, the most impressive regional gains were registered by the Niagara, Nickel Range, and St. Clair River Regions (33.8, 31.8, and 31.7 per cent. respectively). Of the counties, Peel increased by 76.5 per cent., Halton by 54.3 per cent., Lincoln by 37.3 per cent., and Sudbury by 35.6 per cent.

The trend toward urbanization continued over the 1941-51 period. In 1941, 68.4 per cent. of the population of the Province were living in urban centres; (1) in 1951 the proportion had increased to 70.7 per cent. Peel and Lambton Counties showed the greatest increases in urbanization. Peel was 35.3 per cent. urbanized in 1941 and 48.0 per cent. in 1951. Lambton (the St. Clair River Region) was 44.9 per cent. urbanized in 1941 and 56.9 per cent. ten years later. The following table shows the distribution of the total population by farm and non-farm rural groups, and by size of municipality for urban groups:

			951
		Number	% of Total Population
Rural:	Total Farm Non-farm	1,346,44 <u>3</u> 678,043 668,400	29.3 14.7 14.5
Urban:	Total In Centres of 1,000-9,999 In Centres of 10,000-29,999 In Centres of 30,000-99,999 In Centres of 100,000 and over	3,251,099 714,343 463,404 764,448 1,307,751	70.7 15.5 10.1 16.6 28.4
GRAND TOTAL		4,597,542	100.0

Ontario is the most urbanized of all the Canadian provinces. British Columbia with 68.1 per cent. at the 1951 Census, and Quebec with 66.5 per cent., are the closest contenders. In Canada as a whole, 56.7 per cent. of the population was living in centres defined as urban at the 1951 Census.

While the median age of the Ontario population rose very slightly from 29.9 in 1941 to 30.1 in 1951, the proportion of children under 15 increased from 24.4 per cent. to 27.0 per cent. of the total. Persons 65 and over represented 8.0 per cent. of the total in 1941 and 8.7 per cent. ten years later. The following table permits a comparison of Ontario with the other Provinces;

	% Under 15	% 65 and Over	Median Age
Canada	30.3	7.8	27.7
Newfoundland Prince Edward Island Nova Scotia Now Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	39.1 33.4 32.6 35.7 33.7 27.0 28.7 30.7 30.7 30.5 26.1	6.5 9.9 8.5 7.6 5.7 8.7 8.4 8.1 7.1	21.7 26.2 26.5 24.3 24.8 30.1 29.0 27.4 27.2 32.0

<sup>(1)</sup> The figures presented here are based on the definition employed by the Dominion Bureau of Statistics in the 1951 Census of Canada. According to this definition, urban population includes all persons residing in cities, towns and villages of 1,000 and over, whether incorporated or not, and all persons in all parts of census metropolitan areas.

	Average Number of Persons Per Family (1951)
Canada	3.7
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan	4.4 4.0 3.9 4.1 4.2 3.4 3.6
Alberta British Columbia	3·1 3·7 3 3

Within the Province, average family size varies somewhat between urban and rural groups, the average being smallest in the urban group and largest in the rural-farm group. The 1951 Census showed the urban average to be 3.3, the rural (total) average 3.7, the rural-farm average 3.8, and the rural-non-farm average 3.6.

The proportions of women married in each age group at the 1951 Census were generally at record levels, at least with respect to information available in the 1911 to 1951 Censuses. The following table shows the percentage of women married by selected five-year age groups at the 1951 Census (excluding widows and divorced women):

Age	% of Women Married
15 - 19	10.3
20 - 24	57.2
25 - 29	81.8
30 - 34	86.2
35 - 39	86.2
40 - 44	84.4
45 - 49	81.8

The high proportions of women married in the early child-bearing years has been a factor in maintaining the birth rate at a high post-war level. In 1941, for example, 42.7 per cent. of all women 20-24 years of age were married. In 1951 this percentage had risen to 57.2. In addition to earlier marriages, a high rate of child-bearing among married women has been characteristic of the post-war period. The Ontario birth rate in 1953 was 26.6 per thousand population, exceeding even the 1947 rate of 26.1.

Death rates have generally shown a long-run downward tendency at all ages. The trend is most prominent in the younger age groups. In 1953 the death rate per thousand total population was 9.3. The combined result of this and of the birth rate was a natural increase of about 85,000, or a rate of 1.7 per cent. in 1953.

In addition to population growth resulting from the conjunction of high marriage and fertility rates, and falling mortality rates, immigration has been responsible for a large part of the increase since the end of World War II. The following table shows the numbers of immigrants who specified points in Ontario as their intended destinations. How accurate a picture of actual foreign immigration into the Province is provided by "intended destination" data is difficult to say, but the annual variations are probably significant.

Within the Province the Regions having the highest median ages were the Metropolitan (32.6) and the Upper Thames (31.7). Those with the lowest median ages were the Sault (26.5), Highlands (26.3), Clay Belt (24.6), and Nickel Range (24.5). Counties with the highest median ages were Grenville (33.2), Victoria (33.1), and York (32.9). Those with the lowest were Russell (22.3), Prescott (23.5), Nipissing (24.0), Cochrane (24.2), and Sudbury (24.4). In general populations of the northern areas were younger than those of the southern parts of the Province.

Some differences in age structure are apparent between types of rural and urban population. The proportion of young people is somewhat higher in the rural group, and the median age somewhat lower. However, the proportion of persons sixty-five and over is also somewhat higher in the rural group. Of all groups examined, that part of the population living in cities of 100,000 and over had the smallest proportion of children under fifteen and the highest median age.

			1951	
		% Under 15	% 65 and over	Median Age
Rural:	Total Farm Non-farm	31.7 31.9 31.5	8.9 8.7 9.2	27.8 28.1 27.6
Urban:	Total In Centres Under 10,000 In Centres of 10,000 to 29,999 In Centres of 30,000 to 99,999 In Centres of 100,000 and over	25.0 28.5 27.2 26.8 21.3	8.6 9.6 7.9 7.1 9.2	30.9 29.8 29.7 29.7 32.7
TOTAL PO	PULATION	27.0	8.7	30.1

The ratio of males to females was almost unity at the 1951 Census. However, there was some variation within the Province. The northern Regions were generally characterized by an excess of males over females. Kenora, Thunder Bay, and Rainy River showed the highest ratios -- 122, 119 and 118 males per hundred females, respectively. The lowest ratios were those of Carleton (91) and York (95). The following table permits comparison of Ontario with other provinces:

Canada	Number of Males per 100 Females (1951) 102
Newfoundland Prince Edward Island Nova Scotia	105 104 102
New Brunswick	101
Quebec	99 1.01
Ontario Manitoba	103
Saskatchewan	109
Alberta	110
British Columbia	105

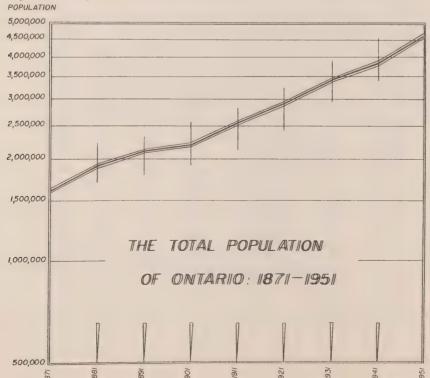
Average family size declined somewhat over the 1941-51 period. In 1941 there was an average of 3.6 persons per family and in 1951 the average was 3.4 persons. Only British Columbia had fewer persons per family.

Number Specifying Ontario as Intended Destination

	<u>'000</u>		1000
1947 1948 1949 1950	36 62 49	1951 1952 1953	105 86 90

Included with this article are two projections of Ontario's population. It is to be understood that anyone using these projections must realize their limitations. Estimate II is based on the assumption of no immigration after 1953. This assumption is probably unrealistic but the projection on this basis presents an estimate of the possible natural increase over the period. The assumptions include a high fertility rate and a continuation of the recent pattern of early marriage, as well as continued long-run declines in specific mortality rates. Estimate I involves the same assumptions as to fertility, marriage, and mortality, but incorporates an assumption of 50,000 net immigration into the Province per annum. This assumption is based on the apparent net migratory change from June 1, 1952 to June 1, 1953 as calculated by subtracting natural increase from total increase (as shown by the Dominion Bureau of Statistics'annual estimates for these years). The difficulties in obtaining accurate information as to foreign and inter-provincial immigration and emigration prevent any more refined assumption as to the level of net immigration.

The projections of fertility and marriage patterns are largely based on the assumption that favourable levels of personal income and employment will be more or less maintained over the period 1954-64. Any appreciable fall in these levels would probably result in postponement of marriage in the non-married group, and postponement of child-bearing in the married group. It might have the further effect of discouraging immigration and possibly encouraging emigration to some extent. Thus, a fall in the levels of personal income and employment might seriously jeopardize the accuracy of the projections. However, it is hoped that the projections will provide some indication as to future population possibilities subject to the preceding cautionary remarks.



# PROJECTION OF THE POPULATION OF ONTARIO BY AGE AND SEX 1953 - 1963 (in thousands)

	<u>(</u> H	1953 Estimate	<u>)</u> <sup>(1)</sup>	(Pr	1958 ojection	<u>n)</u>	<u>(Pı</u>	1963 cojection	1)
Age	М.	F.	Т.	М.	F.	Т.	М.	F.	т.
Group	ES	TIMATE	I (NET I	MMIGRATIO	N OF 50	,000 PER	ANNUM):		
0 - 4 5 - 9 10 - 14 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 66 - 69 70 - 74 75 - 79 80 - 84 85 +	288.8 232.3 182.5 165.3 184.1 200.5 186.5 183.5 166.8 147.8 131.0 110.6 79.3 58.9 35.5 17.5 8.4	275.9 221.8 175.8 175.8 175.2 200.3 189.6 179.1 159.4 137.8 125.2 110.4 94.2 80.7 64.4 41.3 22.3 12.9	564.7 454.1 358.3 324.1 359.3 400.8 376.1 362.6 326.2 285.6 256.2 221.0 186.8 160.0 123.3 76.8 39.8 21.3	293.0 293.6 240.5 189.0 181.3 209.5 225.1 200.7 192.2 169.5 145.0 123.0 100.2 78.2 62.0 41.0 20.0 8.6	279.2 282.4 230.3 182.4 172.2 218.3 200.6 185.1 162.0 136.8 121.2 104.7 83.8 68.6 49.1 25.8 13.5	572.2 576.0 470.8 371.5 353.4 401.7 443.4 401.4 377.3 331.5 281.8 244.2 204.9 162.0 130.6 90.1 45.8 22.1	302.1 300.9 303.1 249.7 206.5 204.1 227.3 235.9 206.8 193.7 166.2 137.7 112.1 86.1 43.9 23.6	296.9 286.8 291.3 238.4 196.3 190.4 206.7 227.1 205.7 187.3 161.6 133.7 115.2 95.6 71.4 52.3 30.9 15.4	599.0 587.7 594.4 488.1 402.8 394.5 434.0 463.0 412.5 381.0 327.8 227.4 227.3 181.6 133.5 96.3 54.5 25.1
LATOT	2,471.9	2,4251	4,897.0	2,772.4	2,708.2	5,480.7	3,071.5	3,003.0	6,074.5
TOTAL	2,471.9		4,897.0 STIMATE		2,708.2 I IMMIGE		3,071.5	3,003.0	6,074.5
TOTAL  0 - 4 5 - 9 10 - 14 15 - 19 20 - 24 25 - 29 35 - 39 40 - 44 45 - 49 50 - 54 65 - 69 70 - 74 75 - 79 80 - 84 85 +							264.4 275.8 283.7 229.6 177.5 161.3 183.8 203.5 184.9 178.6 156.5 132.4 109.5 84.8 61.4 43.5 23.4 9.5	261.1 263.2 273.2 220.7 173.2 156.9 172.1 201.0 187.9 174.7 152.7 127.8 111.7 93.4 70.0 51.6 30.4 15.1	525.5 538.9 556.8 450.2 350.6 318.2 350.6 318.2 359.2 260.3 221.2 260.3 221.2 178.2 131.5 95.1 53.9 24.7

<sup>(1)</sup> Dominion Bureau of Statistics, Ottawa.

# ESTIMATED POPULATION, AREA, POPULATION DENSITY, AND GEOGRAPHICAL DISTRIBUTION OF POPULATION, JUNE 1, 1953 COUNTIES AND REGIONS

	Estimated Population	Area	Estimated Population Density (per sq.mile)	Estimated % of Total Population
Region 1 - Metropolitan	1,394,120	1,714	813.37	28.5
Halton	50,740	363	139.78	1.0
Peel	74,610	469	159.08	1.5
York	1,268,770	882	1,438.51	25.9
Region 2 - Burlington	358,050	879	407.34	7.3
Brant	75,120	421	178.43	1.5
Wentworth	282,930	458	617.75	5.8
Region 3 - Niagara	241,870	719	336.40	4.9
Lincoln	100,850	332	303.77	2.1
Welland	141,020	387	364.39	2.9
Region 4 - Lake Erie	69,920	1,122	62.32	1.4
Haldimand	25,320	488	51.70	0.5
Norfolk	44,600	634	70.35	0.9
Region 5 - Upper Thames	286,560	2,725	105.16	5.9
Elgin	56,790	720	78.88	1.2
Middlesex	170,180	1,240	137.24	3.5
Oxford	59,590	765	77.89	1.2
Region 6 - Border	309,490	1,625	190.46	6.3
Essex	226,420	707	320.25	4.6
Kent	83,070	918	90.49	1.7
Region 7 - St. Clair River Lambton	82,380 82,380	1,124	73.29 73.29	1.7
Region 8 - Upper Grand River	259,160	2,375	109.12	5.3
Perth	54,050	840	64.35	1.1
Waterloo	135,570	516	262.73	2.8
Wellington	69,540	1,019	68.24	1.4
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	277,160	6,873	40.33	5.7
	41,490	1,650	25.15	0.8
	14,720	557	26.43	0.3
	58,810	1,708	34.43	1.2
	51,180	1,295	39.52	1.0
	110,960	1,663	66.72	2.3
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	251,090	4,979	50.43	5.1
	32,760	629	52.08	0.7
	93,160	853	109.21	1.9
	63,000	1,415	44.52	1.3
	27,850	1,348	20.66	0.6
	34,320	734	46.76	0.7
Region 11 - Quinte	186,390	5,482	34.00	3.8
Frontenac	69,980	1,599	43.76	1.4
Hastings	76,690	2,323	33.01	1.6
Lennox and Addington	20,440	1,170	17.47	0.4
Prince Edward	19,280	390	49.44	0.4

	Estimated Population	Area	Estimated Population Density (per sq. mile)	Estimated % of Total Population
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	144,210	2,637	54.69	2.9
	16,180	384	42.14	0.3
	17,680	478	36.99	0.4
	18,510	463	39.98	0.4
	41,420	900	46.02	0.8
	50,420	412	122.38	1.0
Region 13 - Ottawa Valley	406,810	5,995	67.86	8.3
Carleton	258,000	947	272.44	5.3
Lanark	35,000	1,138	30.76	0.7
Prescott	25,790	494	52.21	0.5
Renfrew	70,540	3,009	23.44	1.4
Russell	17,480	407	42.95	0.4
Region 14 - Highlands	113,180	14,967	7.56	2.3
Haliburton	7,750	1,486	5.22	0.2
Muskoka	23,910	1,585	15.09	0.5
Nipissing	53,320	7,560	7.05	1.1
Parry Sound	28,200	4,336	6.50	0.6
Region 15 - Clay Belt	134,330	58,133	2.31	2.7
Cochrane	84,110	52,237	1.61	1.7
Timiskaming	50,220	5,896	8.52	1.0
Region 16 - Nickel Range	129,140	19,646	6.57	2.6
Manitoulin	11,570	1,588	7.29	0.2
Sudbury	117,570	18,058	6.51	2.4
Region 17 - Sault	75,940	19,320	3.93	$\frac{1.6}{1.6}$
Algoma	75,940	19,320	3.93	
Region 18 - Lakehead	177,200	212,967	0.83	3.6
Kenora	41,150	153,220	0.27	0.8
Rainy River	22,960	7,276	3.16	0.5
Thunder Bay	113,090	52,471	2.16	2.3
TOTAL	4,897,000	363,282	13.48	100.0

Because of rounding percentage figures may not add to totals or sub-totals.

# ESTIMATED POPULATIONS OF INCORPORATED CENTRES, OVER 5,000 AT JUNE 1, 1953, CLASSIFIED BY REGIONS

Regions and Centres		Regions and Centres	
1. Metropolitan		9. Blue Water	
Brampton Burlington Forest Hill Leaside Long Branch Minico Newmarket	10,470 6,850 16,560 16,470 9,360 12,130 5,810	Barrie Collingwood Goderich Midland Orillia Owen Sound	14,070 7,600 5,640 7,490 12,890 16,630
New Toronto Oakville Swansea Toronto Weston	9,850 8,390 8,340 688,210 8,980	10. Kawartha  Bowmanville Cobourg Lindsay Oshawa Peterborough	6,000 7,790 9,940 45,000 40,860
2. Burlington	26 612	Port Hope	6,650
Brantford Dundas Hamilton Paris	36,640 7,370 224,560 5,370	Whitby 11. Quinte	6,230
3. Niagara		Belleville Kingston	20,080 39,000
Fort Erie	8 120	Trenton	10,290
Merritton Niagara Falls	8,130 5,060 25,210	12. Upper St. Lawrence	3.0 500
Port Colborne St. Catharines Thorold	13,270 39,240	Brockville Cornwall	13,720 16,780
Welland	7,050 15,830	13. Ottawa Valley	
4. Lake Erie Simcoe	7,540	Eastview Hawkesbury Ottawa Pembroke	15,760 7,520 213,020 13,300
5. Upper Thames		Perth	5,160
Ingersoll London St. Thomas Tillsonburg Woodstock	6,600 98,850 18,360 5,670 16,460	Renfrew Smith's Falls  14. Highlands North Bay	7,900 8,480 19,050
6. Border	10, 100	Parry Sound Sturgeon Falls	5,230 5,360
Chatham Leamington Riverside	22,010 7,130	15. Clay Belt Timmins	27,660
Wallaceburg Windsor	10,470 7,780 122,060	16. Nickel Range	2 ( ) 000
7. St. Clair River		Sudbury	41,934
Sarnia	38,480	17. Sault	36,270
8. Upper Grand River		Sault Ste.Marie	50,210
Galt Guelph Kitchener Preston Stratford Waterloo	21,340 29,810 48,550 8,630 19,290 13,110	18. Lakehead  Fort Frances  Fort William  Kenora  Port Arthur	8,090 36,830 9,040 33,350

# POPULATION CHANGES WITHIN THE PROVINCE OF ONTARIO COUNTIES AND REGIONS

	POPUI	ATION	CHANGE			
	1901	1951	1901- 1951 %	1931 <b>-</b> 1951	1941- 1951	
Region 1 - Metropolitan	313,683	1,276,298	306.9	40.5	26.2	
Halton	19,545	44,003	125.1	65.7	54.3	
Peel	21,475	55,673	159.2	97.7	76.5	
York	272,663	1,176,622	331.5	37.3	23.7	
Region 2 - Burlington	117,592	338,940	188.2	32.9	28.7	
Brant	38,140	72,857	91.0	36.2	28.5	
Wentworth	79,452	266,083	234.9	40.0	28.7	
Region 3 - Niagara	62,140	212,599	242.1	55.3	33.8	
Lincoln	30,552	89,366	192.5	64.9	37.3	
Welland	31,588	123,233	290.1	49.0	31.3	
Region 4 - Lake Erie	50,380	66,846	32.7	26.6	16.3	
Haldimand	21,233	24,138	13.7	12.6	10.5	
Norfolk	29,147	42,708	46.5	36.2	19.9	
Region 5 - Upper Thames	184,692	276,475	49.7	32.0	23.3	
Elgin	43,586	55,518	27.4	27.8	20.3	
Middlesex	92,702	162,139	74.9	37.1	27.5	
Oxford	48,404	58,818	21.5	23.0	15.4	
Region 6 - Border	115,938	296,278	155.5	33.1	23.2	
Essex	58,744	217,150	269.7	35.9	24.6	
Kent	57,194	79,128	38.4	19.3	19.3	
Region 7 - St. Clair River	56,642	74,960	32·3	37.1	$\frac{31.7}{31.7}$	
Lambton	56,642	74,960	32·3	37.1		
Region 8 - Upper Grand River	158,111	245,637	55.4	23.2	18.2	
Perth	49,871	52,584	5.4	2.3	5.8	
Waterloo	52,594	126,123	139.8	40.4	27.8	
Wellington	55,646	66,930	20.3	15.1	12.6	
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	293,781 59,020 21,036 69,590 61,820 82,315	270,599 41,311 14,566 58,960 49,280 106,482	- 7.9 - 30.0 - 30.8 - 15.3 - 20.3 29.4	- 2.2	11.0 0.9 3.5 3.1 12.7 22.3	
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	170,475	238,601	40.0	27.8	22.3	
	27,570	30,115	9.2	16.8	19.4	
	40,408	87,088	115.5	46.0	32.5	
	36,066	60,789	68.5	38.3	28.3	
	31,952	27,127	- 15.1	5.0	4.6	
	34,479	33,482	- 2.9	6.5	8.8	
Region ll - Quinte	145,035	178,500	23.1	27.3	17.2	
Frontenac	44,534	66,099	48.4	44.5	23.1	
Hastings	59,291	74,298	25.3	26.3	17.3	
Lennox and Addington	23,346	19,544	- 16.3	3.5	5.8	
Prince Edward	17,864	18,559	3.9	11.2	10.8	

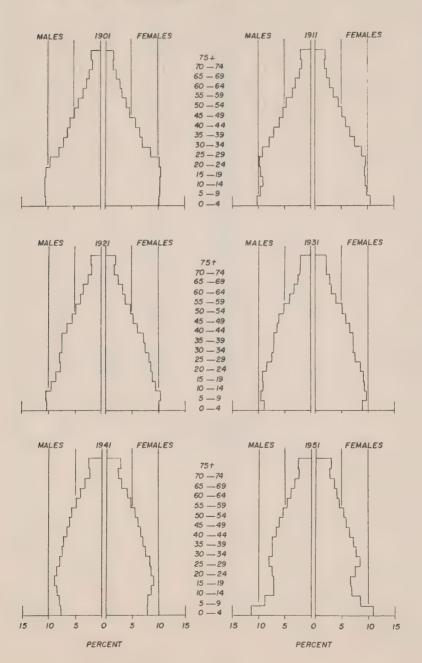
1901 1951 1951 1951 1951 1951 1955 1951 1955 1	1_
Region 12 - Upper St. Lawrence       127,926       137,854       7.8       16.1       7.8         Dundas       19,757       15,818       - 19.9       - 1.7       - 2.1         Glengarry       22,131       17,702       - 20.0       - 5.2       - 5.2         Grenville       21,021       17,045       - 18.9       4.4       6.6         Leeds       37,975       38,831       2.3       10.5       7.7         Stormont       27,042       48,458       79.2       49.0       18.5	4 5 6 7
Region 13 - Ottawa Valley     234,168     387,807     65.6     30.0     16.1       Carleton     96,904     242,247     150.0     42.5     19.6       Lanark     37,232     35,601     - 4.4     8.4     7.1       Prescott     27,035     25,576     - 5.4     4.0     1.2       Renfrew     52,715     66,717     26.6     27.7     21.5       Russell     20,282     17,666     -12.9     -4.4     1.2	6 4 2
Region 14 - Highlands     69,772     110,271     58.0     17.2     8.2       Haliburton     6,559     7,670     16.9     27.9     14.6       Muskoka     20,971     24,713     17.8     17.8     13.2       Nipissing     17,306     50,517     191.9     22.6     16.6       Parry Sound     24,936     27,371     9.8     5.7     - 9.0	6
Region 15 - Clay Belt     1,252     133,866     10,592.2     40.8     1.9       Cochrane     -     83,850     -     44.5     3.9       Timiskaming     1,252     50,016     3,894.9     35.0     -     1.2	9
Region 16 - Nickel Range       27,931       120,804       332.5       75.1       31.8         Manitoulin       11,828       11,214       - 5.2       4.5       3.4         Sudbury       16,103       109,590       580.6       88.1       35.6	4
Region 17 - Sault     25,273     64,496     155.2     38.9     24.0       Algoma     25,273     64,496     155.2     38.9     24.0	
Region 18 - Lakehead     28,156     166,711     492.1     53.8     21.1       Kenora(1)     10,369     39,212     278.2     51.3     17.5       Rainy River     6,568     22,132     237.0     27.5     15.7       Thunder Bay     11,219     105,367     839.2     61.8     23.7	5 7
TOTAL 2,182,947 4,597,542 110.6 34.0 21.4	+

<sup>(1)</sup> Kenora includes Patricia Portion.

PERCENTAGE DISTRIBUTION OF THE POPULATION

BY FIVE-YEAR AGE GROUPS AND SEX,

ONTARIO, 1901-1951



PERCENTAGE AGE DISTRIBUTION OF POPULATION, JUNE 1, 1951 COUNTIES AND REGIONS.

Median	32.6	30.9	29.5 30.0 29.0	29.6	31.7	29.0	29.1	30.5
402	0.470 0.470	7.00	4.7	6.0	8,67,09	7.1.2	5.7	25.7
65-69	WWWW 7007	3 m m m	1.00° S	3.1	8. W.	30.00	30.00	W W W W W W W W W W W W W W W W W W W
55-64	41.50	0000	2.00 2.00 2.00 2.00	800.0	99999 97714	0 0 0 0 4 1 1 1 1	0000	8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
45-54	11001100110011000110001100001	10.7	211.2	10.8	11.13	10.8	10.5	2.11.2
35-44	15.4	14.4	13.8	12.9	13.7	13.0	13.2	13.3
25-34	15.6	16.9	16.8	13.8	15.7	15.9	15.7	13.6
20-24	86.73	8.1.8	7.3	0.19	7.177.0	9.0	7.5	8.57
15-19	6.5 6.5 6.2	4.66.7	88.6	4.7.7	4.000.000.000.0000.0000.0000.0000.0000.0000	7.1	2.9	7.0
10-14	77.0	4.0.7	21/2.	87/2	6.7	2.5	7.8	0.770
5-10	0.01	0 B 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.00	2.66	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0.60	9.5	00000
节	12.97	11.8	11.5	11.8	10.3	11.8	12.0	10.9
Total	0.0001	100.0	100.0	100.0	100.00	100.0	100.0	0.0001
	Region 1 - Metropolitan Halton Peel York	Region 2 - Burlington Brant Wentworth	Region 3 - Miagara Lincoln Welland	Region 4 - Lake Erie Haldimand Norfolk	Region 5 - Upper Thames Elgin Middlesex Oxford	Region 6 - Border Essex Kent	Region 7 - St. Clair River Lambton	Region 8 - Upper Grand River Perth Waterloo Wellington

Median	29 37 57 57 57 57 57 57 57 57 57 57 57 57 57	4.000 830.00 44.00 830.	28.8 29.4 27.8 30.5	29.3 31.4 33.2 33.2 25.7	29.0 30.1 30.1 23.5 23.5 28.3 3
40/8	7.000.89	895546	0 17 17 00 00 00 00 00 00 00 00 00 00 00 00 00	1808-180 0000-00-01	17 17 17 17 17 17 17 17 17 17 17 17 17 1
65-69	0000015	www.	www.44 wou.wo	0 4 6 4 0 F	www.ww.
55-64	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0000000	8 8 7 8 8 0 0 7 9 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	88.1 4.0 6.1 6.0 6.0
45-54	10.01	10.9	10.9.9	4.01	10.01 110.11 10.09 10.09
35-44	12.5	133.50	13.0	13.0	13.8
25-34	13.7 12.1 12.5 12.8 14.2	14.8 15.9 15.9 12.9	15.7	12.5	16.0
20-24	77.07.7	12077777 1207700	75.7.27	700000	0.77.00
15-19	4.0.6.7.7.	000000	4.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7	4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	000 000 000 000 000 000 000 000 000 00
10-14	C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7.7777.55 7.00 8.10 8.11	9.0887.7	88 8 7 8 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8	10.5 10.5 11.3
2-18	000000	0000000	8.7 10.1 10.0 9.2	10.0 11.9 10.0 10.1	00000000000000000000000000000000000000
708	10.3	10.9	12.0	110000000000000000000000000000000000000	12.0
Total	0.001	0.000.000000000000000000000000000000000	100.00	100.0	100.00
	Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	Region 11 - Quinte Frontenac Hastings Lennox and Addington Prince Edward	Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	Region 13 - Ottawa Valley Carleton Lanark Prescott Renfrew Russell

	Region 14 - Higlands Haliburton Muskoka Nipissing Parry Sound	Region 15 - Clay Belt Cochrane Timiskaming	Region 16 - Nickel Range Manitoulin Sudbury	Region 17 - Sault Algoma	Region 18 - Lakehead Kenora Rainy River Thunder Bay	TOTAL
Total	100.00	100.0	100.0	100.0	1000.0	100.0
7-0 7-7	12.7	13.6	13.8	12.5	13.9	11.2
6-10	9.4	11.11	11.3	10.3	10.6	8.7
10-14	90.60	9/9/9	100.5	88.7	7.00	7.1
15-19	01/00.00	8 8 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0.00.7	888	0.17.79	6.9
20-24	57.5	6.7	860.8	08 08 11.1	7.16	7.7
25-34	13.6	14.8	16.9	15.7	16.8	16.1
35-44	13.3	13.2	13.8	13.2	14.3	14.0
45-54	10.00	10.5	10.4	9.6	10.8	11.2
55-64	0.77.00	6.2	7.5	7.7	7.5	8.5
65-69	WW 4 W W	0.00 K	18.4	2/0	0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.4
40	7 0 0 0 V	0.00 0.4.	20.0	6/6	W. W	5.3
Median	26.3 27.6 30.3 24.0 27.2	24.6	25.12	26.5	28.3 27.1 26.1 29.0	30.1

Note: Because of rounding, percentage figures may not add to totals.

	Age	33.1 34.4 34.4 33.0 33.0	29.0 31.4 31.2	31.8 31.5 32.4		29.6 31.7 31.8	29.30.30.50.50.50.50.50.50.50.50.50.50.50.50.50	28.5	31.8 30.7 4.05.8 5.05 5.05
1 CENS	70+ 70+	wanta y o o o o a a u	w44 @00	7.00		6966 6447	ညက္ ဆက္ဆက်	0.4	004 L4 rorre
THE 195	69-59	まるまるす ふまれるろうか	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 ma		ww-+ w &\do \ware	w 01 01 w 60 0	9.0	a wwa n o'n'in'o'
10,000 AT	55-64	01 00 00 00 00 00 00 00 00 00 00 00 00 0	79 0.00 17 11 00	100.00		0000 V150	80 0 80 0 1 1 0	7.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
OVER	45-54	4.5.5.4 4.5.5.4 1.5.5.5 1.5.5.5 5.5.5 6.5.5	10.1	12.9		11.11 0.11 1.30 1.11	10.51	1.01	8.14.4.4 6.4.4.4.4.6.6.6.6.6.6.6.6.6.6.6.6.
ONTARIO	35-44	1146657 + 12 174657 + 13 175657 + 13	14.7	13.6		41.75.41.29.4	### #### ###	13.0	144 144 144 144 144 144 144 144 144 144
ENTRES OF	25-34	11.7	16.7	16.8 17.0 17.4		17.3	16.9 16.9	1.8.1	16.0 15.6 17.2 14.7
0	20-24	φηφφφφ η 4 φφο ψ	\$ 00.00 12 12 13	907.00		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,00 db H 17 W	فن فئ	トの 9 F 数 ひ い ト だ ひ
INCORPORATED	15-19	ア ち ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ ひ	0.09 0.70	8 F Ú		00 kv0 01 H \odo 01 H \odo	900	4.9	0.7.7.9.0 0.4.4.8.0 0.4.4.8.0
POPULATION OF	10-14	L A V V T V H V V W V W	80 O H	0.00		to to to	000	8.9	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
THE POPUL	5-9	2010 41 6100 41	4.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	# m 0		4500	00 00 00 1V O 1V	0.6	0 L W L 70
OF	0-4	40000000000000000000000000000000000000	13.4	10.01		9,010 8,000 7,11	10.00	12.7	10.10 10.7 110.7 110.8
AGE GROUPS	Total	100.00	1000.0	100.00		100.00	100.0	100.0	100.00
PERCENTAGE DISTRIBUTION BY	Incorporated Centres	1. Metropolitan Forest Hill Leaside Mimico New Toronto Toronto (city proper) Toronto (metropolitan area)	2. Burlington Brantford Hamilton (city proper) Hamilton (metropolitan area)	3. Niagara Falls Niagara Falls St. Catharines Welland	4. Lake Erie	5. Upper Thames London (city proper) London (metropolitan area) St. Thomas Woodstock	6. Border Chatham Windsor (city proper) Windsor (metropolitan area)	7. St. Clair River Sarnia	8. Upper Grand River Galt Guelph Kitchener Stratford Waterloo

Median	30.2 30.8 30.4	29.3	30.2	32.4	24.7 30.8 28.9	27.9	25.2	25.7	28.0	29.6
70+	6.6	7.5	r.0.4	6.4	0.44 0.00	0.4	1.8	о° Н	3.9	<b>w</b> w 1-∞
62-69	www 	3.6		w 00 4.	1 m a	ر ش ش	2.0	1.6	3.0	80.00 4.1.
55-64	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- L - 00.	0 0 0 0	0,0 w.o.	4 8 L	φ	0.9	5.0	7.7	7.00
45-54	10.01	12.0	10.3	11.0	7.2	10.0	10.4	9.1	6.6	10.5
35-44	13.8	13.9	14.1	14.9	13.0 15.0 14.0	13.1	14.1	14.9	14.0	14.5
25-34	17.0	17.6	17.2	15.3	20.3	16.0	16.1	18.9	16.4	17.3
20-24	8.7.7.7.2.3	9. 80 9. 7.	4.9.8	4.7	\$ \$ \$ \$ \$	0.8	7.8	6.6	8.6	2.5
15-19	8.92	7.5	7.1	0.8	6 6 6 7 7 8 8 9	8,5	7.5	9.7	7.00	9.9
10-14	0.0°F	6.9	7.0.	8 e. s	8,09 1,0,0,0	ω «	8.0	4.8	7.8	7.2
5-9	∞ ∞ ∞ ≠ 0,∞	7.8	8000 900	6.6	0.11. 8.2 1.9	9.3	11.4	6.	4.6	80 0 80 0
0-4	11.3	10.9	11.3	10.2	16.0	11.3	13.1	12.9	11.5	12.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Incorporated Centres	9. Blue Water Barrie Orillia Owen Sound	10. Kawartha Oshawa Peterborough	11. Quintc Belleville Kingston Trenton	12. Upper St. Lawrence Brockville Cornwall	13. Ottawa Valley Eastview Ottawa (city proper) Ottawa (metropolitan area)	14. Highlands North Bay	15. Clay Belt Timmins	16. Nickel Range Sudbury	17. Sault Sault St. Marie	18 Lakehead Fort William Port Arthur

Source: Dominion Bureau of Statistics; Census of Canada, 1951.

### RURAL - URBAN DISTRIBUTION OF POPULATION IN ONTARIO, BY COUNTIES AND REGIONS 1941 and 1951

		1	941			1951-	
Region	AKFR Sc.mi.	Total	Rural	Urban	Total	Rural	Urban
Metropolitan Halton Peel York	1714 363 469 882	1,011,603 28,515 31,539 951,549	6.1 43.9 64.7 3.0	93.9 56.1 35.3 97.0	1,276,298 44,003 55,673 1,176,622	7.0 40.6 52.0 3.6	93.0 59.4 48.0 96.4
Burlington Brant Wentworth	179 421 458	263,416 56,695 206,721	12.0 30.7 6.9	88.0 69.3 93.1	338,940 72,857 266,083	11.7 33.0 5.9	88.3 67.0 94.1
Niagara Lincoln Welland	719 322 387	158,902 65,066 93,836	30.8 38.3 25.6	69.2 61.7 74.4	212,599 89,366 123,233	41.9	67.1 58.1 73.6
Lake Erie Haldimand Norfolk	1122 488	57,465 21,854 35,611	68.2 68.5 68.0	31.8 31.5 32.0	66,846 24,138 42,708	67.3	32.7 32.7 32.7
Upper Thames Elgin Middlesex Oxford	2728 720 1240 165	224,290 46,150 127,166 50,974	38.1 55.0 26.0 53.0	61.9 45.0 74.0 47.0	276,475 55,518 162,139 58,818	56.5 22.8	64.6 43.5 77.2 49.8
Border / Essex Kent	625 707	240,576 174,230 66,346	30.1 20.2 56.0	69.9 79.8 44.0	296,278 217,150 79,128	18.1	72.9 81.9 48.3
St. Clair Riv Lambton	er '	56,925 56,925	55.1 55.1	44.9	74,960 74,960		56.9 56.9
Upper Grand R Perth Waterloo Wellington	iver <u>2375</u> 840 516 1019	207,867 49,694 98,720 59,453	36.4 45.4 25.8 46.2	63.6 54.6 74.2 53.8	245,637 52,584 126,123 66,930	43.1 25.2	66.3 56.9 74.8 53.8
Blue Water Bruce Dufferin Grey Haron Simoce	6873 1650 557 1708 1295 1663	243,714 41,680 14,075 57,160 43,742 87,057	62.8 72.1 73.5 62.2 73.2 51.8	37.2 27.9 26.5 37.8 29.8 48.2	270,599 41,311 14,566 58,960 49,280 106,482	69.0 69.6 57.6 70.0	39.2 31.0 30.4 42.4 30.0 46.0
Kawartha Durham Ontario Peterboroug Victoria Northumberl	1348	195,045 25,215 65,718 47,392 25,934 30,786	48.3 63.6 40.4 33.7 59.3 65.4	51.7 36.4 59.6 66.3 40.7 34.6	238,601 30,115 87,088 60,789 27,127 33,482	60.2 33.9 32.4	57.2 39.8 66.1 67.6 44.7 41.2
Quinte Frontenac Hastings Lennox and Prince Edwa		1170 18,469	51.6 36.4 50.8 81.6 70.5	48.4 63.6 49.2 18.4 29.5	178,500 66,099 74,298 19,544 18,559	37.8 47.7 80.1	49.4 62.2 52.3 19.9 23.1
Upper St. Law Dundas Glengarry Grenville Leeds Stormont	rence 384 478 478 463 900 4/2	127,878 16,210 18,732 15,989 36,042 40,905	60.8 77.2 88.4 61.8 57.3 44.2	39.2 22.8 11.6 38.2 42.7 55.8	137,854 15,818 17,702 17,045 38,831 48,458	66.9 87.5 60.2 56.5	42.7 33.1 12.5 39.8 43.5 57.2

	1	941		]	951	
Region	Total	Rural	Urban	Total	Rural	Urban
Ottawa Valley Carleton Lanark Prescott Renfrew Russell	333,092 202,520 33,143 25,261 54,720 17,448	29.3 10.0 44.3 65.1 58.2 82.5	70.7 90.0 55.7 34.9 41.8 17.5	387,807 242,247 35,601 25,576 66,717 17,666	27.6 9.7 41.4 66.1 56.5 80.2	72.4 90.3 58.6 33.9 43.5 19.8
Highlands Haliburton Muskoka Nipissing Parry Sound	21,835	64.5 100.0 66.7 46.6 80.8	35.5 - 33.3 53.4 19.2	110,271 7,670 24,713 50,517 27,371	62.3 100.0 63.7 45.8 81.1	37.7 -36.3 54.2 18.9
Clay Belt Cochrane Timiskaming	131,334 80,730 50,604	46.1 44.7 48.4	53·9 55·3 51·6	133,866 83,850 50,016	40.4 40.2 40.8	59.6 59.8 59.2
Nickel Range Manitoulin Sudbury	91,656 10,841 80,815	45.0 90.0 39.0	55.0 10.0 61.0	120,804 11,214 109,590	41.6 87.5 36.9	58.4 12.5 63.1
Sault Algoma	52,002 52,002	42.8	57.2 57.2	64,496 64,496	41.5	58.5 58.5
Lakehead Kenora(1) Rainy River Thunder Bay	137,704 33,372 19,132 85,200	42.6 62.2 62.9 30.4	57.4 37.8 37.1 69.6	166,711 39,212 22,132 105,367	40.1 58.2 57.6 29.6	59.9 41.8 42.4 70.4
TOTAL	3,787,655	31.6	68.4	4,597,542	29.3	70.7

<sup>(1)</sup> Kenora includes Patricia Portion

## BIRTHS, MARRIAGES, AND DEATHS: NUMBERS AND RATES FOR COUNTIES AND REGIONS - 1952

	B	IRTHS	MAR	RIAGES	DE	ATHS
Region	No.	Rate Per 1,000 Pop.	No.	Rate Per 1,000 Pop.	No.	Rate Per .,000 Pop.
l Metropolitan Halton Peel York	31,872 1,125 1,652	23.6 23.7 25.1 23.5	14,574 332 433 13,809	10.8 7.0 6.6	12,258 369 443 11,446	9.1 7.8 6.7
2 Burlington Brant Wentworth	9,150 1,943 7,207	26.0 25.8 26.1	3,650 643 3,007	8.5	3,176 727 2,449	
3 Niagara Lincoln Welland	6,096 2,536 3,560	27.0 27.0 26.9	2,348 904 1,444	10.4 9.6 10.9	1,830 779 1,051	
4 Lake Erie Haldimand Norfolk	1,783 663 1,120		559 197 362	8.0	676 278 398	11.3
5 Upper Thames Elgin Middlesex Oxford	6,915 1,224 4,234 1,457	21.7 25.8	2,377 385 1,517 475	6.8 9.2	2,819 568 1,638 613	10.1
6 Border Essex Kent	8,168 5,989 2,179	26.8 26.7 27.0	2,960 2,238 722	9.7 10.0 8.9	2,655 1,878 777	8.7 8.4 9.6
7 St. Clair River Lambton	2,338 2,338	28.9 28.9	687 687	8.5 8.5	786 786	9.7 9.7
8 Upper Grand River Perth Waterloo Wellington	6,428 1,286 3,457 1,685	24.0 26.1	2,313 390 1,354 569	7.3	2,382 598 1,100 684	11.8
9 Blue Water Bruce Dufferin Grey Huron Simcoe	6,773 1,009 355 1,377 1,281 2,751	24.3 24.3 23.4 25.6	2,090 297 111 469 350 863	7.1 7.6 8.0 7.0	3,049 502 157 701 608 1,081	12.1 10.8 11.9 12.1
10 Kawartha Durham Ontario Peterborough Victoria Northumberland	6,380 782 2,441 1,730 649 778	25.1 27.0 28.1 23.2	1,930 242 753 479 222 231	8.3 7.8 7.9	2,411 346 766 593 337 369	11.1 8.5 9.6
ll Quinte Frontenac Hastings Lennox and Addin Prince Edward	5,003 1,865 2,147 2,147 498	27.1 7 28.5 3 24.9	1,565 598 66° 148	8.7 7 8.9 3 7.5	1,848 655 786 194 213	10.1 9.5 10.4 9.8 11.4
12 Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	3,569 361 453 403 888 1,461	22.3 3 25.2 3 21.4 3 23.6	1,09 110 13 11 <sup>1</sup> 290 44	6.8 1 7.3 4 6.1 2 7.7	1,476 187 197 227 440 425	10.5 11.5 10.9 12.1 11.7 8.5

	BIRT	HS	MARRIA	GES	DI	EATHS
		te Per	No. 1,0	te Per		Rate Per L,000 Pop.
13 Ottawa Valley Carleton Lanark Prescott Renfrew Russell	10,732	27.0	3,741	9.4	3,977	10.0
	6,426	25.7	2,511	10.0	2,415	9.6
	862	23.9	268	7.4	454	12.6
	787	30.6	233	9.1	279	10.9
	2,143	31.6	571	8.4	657	9.7
	514	28.7	158	8.8	172	9.6
14 Highlands	3,137	27.8	959	8.5	1,035	9.2
Haliburton	185	23.4	49	6.2	66	8.4
Muskoka	575	23.3	196	7.9	239	9.7
Nipissing	1,653	31.5	503	9.6	451	8.6
Parry Sound	724	26.0	211	7.6	279	10.0
15 Clay Belt	4,110	30.5	1,107	8.2	1,106	8.2
Cochrane	2,683	31.9	722	8.6	683	8.1
Timiskaming	1,427	28.2	385	7.6	423	8.4
16 Nickel Range	4,403	35.5	1,154	9·3	910	7.3
Manitoulin	286	24.9	85	7·4	124	10.8
Sudbury	4,117	36.6	1,069	9·5	786	7.0
17 Sault Algoma	2,079 2,079	30.5	660 660	9.7 9.7	570 570	8.4
18 Lakehead	4,955	28.2	1,486	8.5	1,438	8.2
Kenora	1,247	30.8	263	6.5	373	9.2
Rainy River	669	29.2	178	7.8	180	7.9
Thunder Bay	3,039	27.1	1,045	9.3	885	7.9
TOTAL	123,891	26.0	45,251	9.5	44,402	9.3

Note: Births and deaths are by place of residence; marriages are by place of occurrence.

Source:

Numbers of births, marriages, and deaths are provided by the
Vital Statistics Branch of the Ontario Government.

Rates are based on these figures and on the population estimates
made by the Ontario Bureau of Statistics and Research.

### BIRTHS, MARRIAGES, AND DEATHS: NUMBERS AND RATES FOR INCORPORATED CENTRES OVER 5,000 - 1952

	B	IRTHS	MAI	RRIAGES	D	EATHS
REGIONS AND CENTRES	No.	Rate Per 1,000 Pop.	No.	Rate Per 1,000 Pop.	No.	Rate Per 1,000 Pop.
l Metropolitan Brampton Burlington Forest Hill Leaside Long Branch Mimico Newmarket New Toronto Oakville Swansea Toronto Weston	244 232 239 334 240 305 123 244 172 159 14,472 216	27.0 36.3 15.1 20.4 27.0 25.8 21.0 21.5 23.4 19.3 21.0 24.4	112 64 26 110 117 139 50 119 93 73 11,383	12.4 10.0 1.6 6.7 13.1 11.8 8.5 10.5 12.7 8.9 16.5 11.9	85 69 111 95 47 89 71 77 67 68 7,695	9.4 10.8 7.0 5.8 5.3 7.5 12.1 6.8 9.1 8.3 11.1
2 Burlington Brantford Dundas Hamilton Paris	958 200 5,581 129	25.6 27.4 25.4 24.3	488 87 2,714 46	13.0 11.9 12.4 8.7	404 99 1,984 62	10.8 13.6 9.0 11.7
3 Niagara Fort Erie Merritton Niagara Falls Port Colborne St. Catharines Thorold Welland	186 126 556 367 930 184 462	23.5 26.0 22.8 28.4 24.2 27.8 29.4	82 46 542 163 610 73 323	10.4 9.5 22.3 12.6 15.9 11.0 20.6	63 40 226 99 377 80 129	8.0 8.3 9.3 7.7 9.8 12.1 8.2
4 Lake Erie Simcoe	197	26.9	118	16.1	95	13.0
5 Upper Thames Ingersoll London St. Thomas Tillsonburg Woodstock	174 2,405 413 128 398	24.8 22.6 23.2	71 1,201 190 88 151	11.0 12.4 10.4 15.9 9.5	74 1,053 209 59 165	11.5 10.9 11.5 10.7 10.4
6 Border Chatham Leamington Riverside Wallaceburg Windsor	553 177 295 218 3,098	25.4 30.1 28.3	310 . 90 . 55 . 76 1,688	14.4 12.9 5.6 9.9 13.9	224 71 70 67 1,118	10.4 10.2 7.1 8.7
7 St. Clair River Sarnia	1,212	31.7	401	10.5	301	7.9
8 Upper Grand River Galt Guelph Kitchener Preston Stratford Waterloo	474 705 1,310 193 450 351	24.4 28.3 23.3 23.4	232 317 649 78 165	11.0 14.0 9.4 8.6	201 276 412 78 217 100	9.6 8.9 9.4 11.3

MARRIAGES ---- DEATHS ----

	B	IRTHS	MA	RRIAGES	D	EATHS
REGIONS AND CENTRES	No.	Rate Per 1,000 Pop.	No.	Rate Per 1,000 Pop.	No.	Rate Per 1,000 Pop.
9 Blue Water						
Barrie	391	30.3	174	13.5	14	10.9
Collingwood	175	23.3	68	9.1	122	16.2
Goderich	143	27.4	48	9.2	80	15.3
Midland	192	25.8	64	8.6	113	15.2 9.4
· Orillia Owen Sound	344 414	27.8 25.5	137 186	11.1	117 184	11.3
10 Kawartha						
Bowmanville	163	29.4	66	11.9	53	9.5
Cobourg	169	21.8	65	8.4	76	9.8
Lindsay	241	24.5	104	10.6	109	11.1
Oshawa	1,172	27.6	427	10.1	310	7.3
Peterborough	1,116		374	9.5	341	8.6
Port Hope	159	24.0	68	_	75	
Whitby	157	20.6	97	12.7	100	13.1
ll Quinte		_	0		200	20 (
Belleville	548	27.8	258	13.1	208	10.6
Kingston	1,164		479	12.6	430	11.3 9.7
Trenton	363	35.7	117	11.5	99	7.1
12 Upper St. Lawrence					,	
Brockville	301		128	10.2	149	
Cornwall	527	31.4	254	15.1	150	8.9
13 Ottawa Valley						
Eastview	563	38.6	162	11.1	87	6.0
Hawkesbury	269		82	_	77	10.6
Ottawa	5,197		2,223		2,077	10.0
Pembroke	420	0 1	169		136	10.6
Perth	107		59		60 84	11.7
Renfrew	249		90		112	
Smith's Falls	240	28.4	69	0.2	115	10.0
14 Highlands	==0	07.5	077	7 1. 17	176	9.5
North Bay	513	27.7	273 80		70	
Parry Sound	166 210		73		52	
Sturgeon Falls	210	40.9	13	TT 0 C	,,,	2012
15 Clay Belt	0.50	27. 2	0017	30.5	211	7.7
Timmins	852	31.3	287	10.5	211	[+]
16 Nickel Range						
Sudbury	1,657	39.5	678	16.2	316	7.5
2. G3.t						
17 Sault Sault St. Marie	1.003	29.3	479	14.0	288	8.4
pault 50. Maile	1,000	2)•0	.,,			
18 Lakehead	244	30.2	109	13.5	82	10.2
Fort Frances	968	~ .	458		301	
Fort William	261		88		81	
Kenora Port Arthur	969		434		354	·
FOI O AI OIR	,0,					

Note: Births and deaths are by place of residence; marriages are by place of occurrence.

Source: Numbers of births, marriages, and deaths are provided by the Vital

Statistics Branch of the Ontario Government.

Rates are based on these figures and on the population estimates made by the Ontario Bureau of Statistics and Research.

# PERCENTAGE DISTRIBUTION OF THE POPULATION OF ONTARIO BY MARITAL STATUS - COUNTIES AND REGIONS

	Total %	Single %	Married %	Widowed %	Divorced %
Region 1 - Metropolitan Halton Peel York	100.0 100.0 100.0	42.1 44.4 46.3 41.8	51.7 50.6 49.4 51.9	5.7 4.8 4.1 5.8	0.4 0.2 0.2 0.4
Region 2 - Burlington Brant Wentworth	100.0 100.0 100.0	43.4 44.5 43.1	50.9 49.8 51.3	5.3 5.5 5.3	0.3 0.3 0.4
Region 3 - Niagara Lincoln Welland	100.0 100.0 100.0	44.7 44.4 44.9	50.3 50.4 50.2	4.8 5.0 4.7	0.2
Region 4 - Lake Erie Haldimand Norfolk	100.0 100.0 100.0	45.5 45.3 45.6	48.9 48.8 49.0	5.4 5.9 5.1	0.2 0.1 0.3
Region 5 - Upper Thames Elgin Middlesex Oxford	100.0 100.0 100.0 100.0	44.5 43.8 44.4 45.2	49.2 49.5 49.3 48.7	6.0 6.4 5.9 5.8	0.3 0.3 0.4 0.2
Region 6 - Border Essex Kent	100.0 100.0 100.0	45.6 45.5 46.0	49.4 49.7 48.6	4.7 4.5 5.2	0.3 0.4 0.2
Region 7 - St. Clair River Lambton	100.0 100.0	45.8 45.8	48.7 48.7	5.2 5.2	0.2
Region 8 - Upper Grand River Perth Waterloo Wellington	100.0 100.0 100.0	45.7 44.9 45.4 46.9	48.7 48.8 49.5 47.1	5.5 6.2 4.9 5.8	0.2 0.1 0.2 0.2
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	100.0 100.0 100.0 100.0 100.0	47.3 47.6 45.6 45.6 47.0 48.5	48.2 46.9	6.4	0.1 0.1 0.2 0.1
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	100.0 100.0 100.0 100.0 100.0	45.5 45.0 45.0 46.7 45.2 45.6	50.0 47.8 47.9	5·3 6.7	0.2 0.1 0.3 0.2 0.2
Region 11 - Quinte Frontenac Hastings Lennox and Addington Prince Edward	100.0 100.0 100.0 100.0	47.1 47.8 47.3 46.0 44.9	47.3 46.8 47.3 47.6 48.8	5.4 5.2 5.3 6.2 6.1	0.2 0.3 0.2 0.2
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	100.0 100.0 100.0 100.0 100.0	48.8 46.2 54.9 44.6 46.0 51.2	45.4 47.4 40.2 48.3 47.0 44.2	5.7 6.4 4.9 7.0 6.9 4.4	0.1 0.1 0.2 0.2 0.1

	Total %	Single %	Married %	Widowed %	Divorced %
Region 13 - Ottawa Valley Carleton Lanark Prescott Renfrew Russell	100.0 100.0 100.0 100.0 100.0	50.3 49.0 47.4 56.6 52.3 56.8	44.3 45.2 46.2 39.1 43.2 39.2	5.3 5.5 6.4 4.3 4.4 3.9	0.2 0.2 0.1 -
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	100.0 100.0 100.0 100.0	51.0 47.8 46.2 53.9 50.9	44.4 47.6 48.0 42.3 44.2	4.4 4.4 5.5 3.7 4.9	0.1 0.2 0.2 0.1 0.1
Region 15 - Clay Belt Cochrane Timiskaming	100.0 100.0 100.0	53.2 54.1 51.7	43.6 43.1 44.4	$\frac{3.1}{2.7}$ 3.8	0.1 0.1 0.2
Region 16 - Nickel Range Manitoulin Sudbury	100.0 100.0	53.0 53.2 53.0	43.9 42.0 44.1	3.0 4.7 2.8	0.1 0.1 0.1
Region 17 - Sault Algoma	100.0	50.9 50.9	44.6	4.3	0.2
Region 18 - Lakehead Kenora Rainy River Thunder Bay	100.0 100.0 100.0	49.4 50.9 51.2 48.5	46.5 45.0 45.0 47.4	3.9 3.9 3.6 4.0	0.2 0.2 0.2 0.2
Total	100.0	45.8	48.7	5.2	0.3

# AVERAGE NUMBER OF PERSONS PER FAMILY, 1941 AND 1951 COUNTIES AND REGIONS

			1941	Rural		Urban	1951-	Rural	
		Urban		Ruiai	Non-	Olban		210202	Non-
Reg	ions and Counties		Total	Farm	Farm		Total	Farm	Farm
1.	Metropolitan	3.3	3.5	3.6	3.5	3.1	3.5	3.6	3.5
	Halton	3.4	3.5	3.5 3.6	3.4 3.6	3·3 3·5	3.5 3.5	3.6 3.5	3.4
	Peel York	3·3 3·3	3.6 3.5	3.6	3.5	3.1	3.5	3.6	3.4
	1011					_			_ =
2.	Burlington	3.4	3.5	3.6	3.5	3.2	3.6	3.7 3.8	3.5 3.5
	Brant Wentworth	3.4	3.6 3.5	3.6 3.6	3.6 3.5	3.2 3.2	3.6 3.6	3.6	3.6
	#CITOWOT CIT	_							
3.	Niagara	3.4	3.6	3.6	3.6	3.3	3.6	3.7 3.7	3.5
	Lincoln Welland	3.3 3.5	3.6 3.7	3.6 3.6	3.6 3.7	3.3 3.4	3.5 3.6	3.7	3.6
	Welland	3.0	2.1	5.0	5 1	<b>J</b>			
4.	Lake Erie	3.3	3.6	3.7	3.5	3.2	3.6	3.7	3.5
	Haldimand	3.3 3.3	3.6 3.7	3.6 3.7	3.6 3.5	3.2 3.2	3.6 3.6	3.6 3.7	3.5 3.5
	Norfolk	2.2	2 • 1	2 * 1	3.7	J * *-			
5.	Upper Thames	3.3	3.5	3.6	3.3	3.2	3.5	3.6	3.3
	Elgin	3.2 3.3	3.5 3.5	3.6 3.5	3.2 3.4	3.1 3.2	3.5 3.5	3.6 3.6	3·3 3·4
	Middlesex Oxford	3.3	3.6	3.6	3.3	3.2	3.6	3.7	3.3
						0 1	2 7	2 0	26
6.	Border	3.6	3.9	3.9 3.9	3.9 4.0	3.4 3.4	3.7 3.7	3.8 3.8	3.6 3.6
	Essex	3.6 3.4	3.9 3.8	3.8	3.6	3.4	3.7	3.8	3.5
	Kent	_							
7.	St. Clair River	3.4	3.7	3.7	3.7	3.4	3.6 3.6	3.7 3.7	3.5 3.5
	Lambton	3.4	3.7	3.7	3.7	3.4	3.0	2 • 1	3.7
8.	Upper Grand River	3.4	3.8	3.8	3.6	3.3	3.7	3.9	3.4
	Perth	3.4	3.7	3.7	3.2	3.2	3.7	3.8	3.2 3.5
	Waterloo Wellington	3.5 3.4	3.9 3.7	4.1 3.8	3.7 3.4	3·3 3·3	3.7 3.7	3.8	3.3.
	HOTTINGOOM	<i>J</i> · ·		3					
9.	Blue Water	3.4	3.7	3.7	3.4	3.3	3.6	3.8 3.8	3.4
	Bruce Dufferin	3.4 3.2	3.8 3.6	3.8 3.6	3.6 3.3	3.3 3.2	3.7 3.6	3.7	3.1
	Grey	3.4	3.7	3.7	3.4	3.3	3.6	3.7	3.2
	Huron	3.2	3.6	3.7	3.2	3.2	3.6	3.7	3.3
	Simcoe	3.5	3.7	3.8	3.5	3.3	3.6	3.8	3.5
10.	Kawartha	3.4	3.6	3.6	3.5	3.3	3.5	3.6	3.4
	Durham	3.3	3.5	3.6	3.2	3.3	3.5	3.6	3.4
	Ontario	3.4 3.5	3.6 3.8	3.6 3.9	3.5 3.8	3.3 3.4	3.5 3.7	3.7 3.8	3.4
	Peterborough Victoria	3.4	3.5	3.6	3.4	3.3	3.5	3.6	3.3
	Northumberland	3.4	3.5	3.6	3.2	3.3	3.5	3.6	3.4
7.7	Quinte	3.4	3.8	3.8	3.7	3.3	3.7	3.8	3.6
11.	Frontenac	3.4	3.9	3.9	3.8	3.3	3.8	3.8	3.7
	Hastings	3.5	3.9	4.0	3.8	3.3	3.8	3.9	3.7
	Lennox and Addington	3.4	3.6	3.6 3.5	3.5 3.3	3.2 3.1	3.6 3.4	3.6 3.5	3.5 3.4
	Prince Edward	3.2	3.5	3.7	٠٠)	J + 1.	J	3.7	J• .
12.	Upper St. Lawrence	3.6	3.9	3.8	3.9	3.5	3.8	3.8	3.6
	Dundas	3.4	3.7	3.8	3.3	3.3	3.6 4.1	3.7 4.3	3.3 3.8
	Glengarry Grenville	4.2 3.4	3.4	4.3	4.0 3.4	3.8 3.8	3.4	3.5	3.3
	Leeds	3.4	3.6	3.6	3.4	3.2	3.6	3.7	3.5
	Stormont	3.9	4.1	4.0	4.2	3.7	4.0	4.1	3.9

		1941-			1951			
	Urban		Rural	-	Urban		Rural	
Regions and Counties		Total	Farm	Non- Farm		Total	Farm	Non- Farm
Carleton Lanark Prescott Renfrew Russell	3·7	4.2	4.3	3.9	3.5	4.0	4.2	3.8
	3·7	3.9	4.0	3.8	3.4	3.8	3.9	3.6
	3·5	3.8	3.8	3.6	3.3	3.7	3.8	3.6
	4.6	4.6	4.7	4.2	4.2	4.4	4.6	4.0
	3·9	4.2	4.3	4.0	3.6	3.9	4.1	3.8
	4·3	4.7	4.9	4.2	4.2	4.5	4.7	4.0
14. Highlands Haliburton Muskoka Nipissing Parry Sound	4.0	4.3	4.6	4.1	3.6	3.9	4.4	3.8
	-	4.0	4.1	4.0	-	3.7	4.1	3.5
	3.5	4.0	4.1	3.9	3.3	3.5	3.7	3.5
	4.3	4.9	5.3	4.5	3.7	4.5	5.1	4.1
	3.7	4.2	4.3	4.1	3.5	3.8	4.0	3.7
15. <u>Clay Belt</u>	3.9	4.2	4.9	3.9	3.7	4.4	4.9	4.1
Cochrane	3.9	4.4	5.2	4.1	3.8	4.5	5.1	4.2
Timiskaming	3.8	3.9	4.6	3.8	3.6	4.2	4.6	3.9
16. <u>Nickel Range</u> Manitoulin  Sudbury	3.8	4.3	4.6	4.2	3.8	4.2	4.5	4.1
	3.7	4.1	4.0	4.2	3.6	4.0	4.0	4.0
	3.8	1.4	5.0	4.2	3.8	4.3	4.7	4.1
17. <u>Sault</u> Algoma	3.8 3.8	4.1	4.2	4.1	3.6	4.0	4.0	3·9 3·9
18. <u>Lakehead</u>	3.6	3.9	4.1	3.8	3.4	3.9	4.0	3.8
Kenora	3.7	3.9	4.2	3.8	3.4	3.9	4.2	3.9
Rainy River	3.8	4.2	4.3	4.0	3.6	4.0	4.3	3.8
Thunder Bay	3.4	3.8	3.8	3.8	3.4	3.7	3.7	3.7
ONTARIO	3.4	3.8	3.9	3.7	3.3	3.7	3.8	3.6

	Tot	al		Tot	al
	1941	1951		1941	1951
1. Metropolitan 2. Burlington 3. Niagara 4. Lake Erie 5. Upper Thames 6. Border 7. St. Clair River 8. Upper Grand River 9. Blue Water	3.4 3.5 3.5 3.7 3.7 3.5 3.5	3.1 3.3 3.4 3.5 3.5 3.5 3.5 3.5	10. Kawartha 11. Quinte 12. Upper St. Lawrence 13. Ottawa Valley 14. Highlands 15. Clay Belt 16. Nickel Range 17. Sault 18. Lakehead	3.5 3.6 3.7 3.9 4.2 4.1 4.1 3.9 3.7	3.4 3.5 3.6 3.6 3.8 3.9 3.7 3.6
			ONTARIO	3.6	3.4

Source: Dominion Bureau of Statistics, Census of Canada, 1941 and 1951.

DISTRIBUTION BY PERIOD OF IMMIGRATION OF ONTARIO'S IMMIGRANT POPULATION LIVING AT THE 1951 CENSUS

Asiatic Origins	100.0	23 27.12 27.12 27.12 20.00 20.	100.0	25.20 31.02 20.1.0 7.00 1.00.7	100.0	2000 2000 2000 2000 2000 2000 2000 200
Ukrain- ian	100.0	11.0 16.4 32.6 6.7 6.7 0.5 15.2	100.0	10.5 8.8 8.6 7.0 1.7 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	100.0	183.83 8.83.83 8.000 0.71 7.700 0.71
Scandin- avian	100.0	109.8 39.27 59.20 11.30 11.30 13.7	100.0	0.44 0.48 0.48 0.44 0.44 0.44 0.44 0.44	100.0	4 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +
Russian	100.0	283.4. 283.4. 283.4. 200.000,000,000,000,000,000,000,000,000,	100.0	282.6 282.6 283.6 2.7.7 2.00 2.00 2.00 2.00	100.0	10 24 31 31 44 50 50 50 50 50 50 50 50 50 50 50 50 50
Polish	100.0	0000 0000 0000 0000 0000 0000 0000 0000 0000	100.0	0100 3100 3100 1700 1700 1700 1700 1700	100.0	20004.00 805.0004.00 805.0004.00
Nether- lands	100.0	6.5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	100.0	27.7 27.7 24.23 34.23 34.23	100.0	11.0 11.0 11.0 11.3 11.3 58.4
Italian	100.0	13.1 105.2 20.4 5.5 7.0 36.8 36.8	100.0	119.50 20.57 4.00 10.00	100.0	1000 1000 1000 1000 1000 1000 1000 100
German	100.0	W W W W W W W W W W W W W W W W W W W	100.0	14 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	100.0	11 8 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
French	100.0	0.04 V V V V V V V V V V V V V V V V V V V	100.0	89111 897714 8077144 8	100.0	0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
British Isles Origins	100.0	004440000 00440004	100.0	0000 + 11111 0000 + 2000	100.0	0 1 4 8 6 4 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Total	100.0	2003 2004 2004 2007 2009 2009 2009 2009	100.0	201.1 266.7 266.6 20.0 10.0	100.0	16.6 14.7 1.7 1.7 1.8 1.8 1.9 1.9 1.9
	Province	Before 1911 1911 - 1920 1921 - 1930 1931 - 1940 1941 - 1945 1947 - 1948 1949 - 1951	Urban	Before 1911 1911 - 1920 1921 - 1930 1931 - 1940 1941 - 1945 1947 - 1948 1949 - 1951	Rural	Before 1911 1911 - 1920 1921 - 1930 1931 - 1940 1941 - 1945 1946 - 1948

DEATH RATES PER 1,000 IN ONTARIO BY FIVE-YEAR AGE GROUPS, 1921-1950

Year	Total	Under 5	5~9	10-14	15-19	20-24	25-29	30-34	35-39	40-44
Year 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940	Total  11.8 11.4 11.8 10.8 10.9 11.3 10.8 11.4 11.0 10.4 10.5 10.1 9.9 10.2 10.4 10.6 10.0 10.1 10.3	28.3 25.1 25.2 22.6 22.9 22.2 20.0 20.2 21.9 21.3 19.1 16.7 14.7 14.7 14.7 14.8 14.0 12.5	5-9 3.0 2.3 2.3 1.9 2.0 2.0 2.1 2.1 1.5 1.2 1.3 1.4 1.4 1.2 1.1	10-14 1.9 1.8 1.7 1.7 1.7 1.7 1.8 1.6 1.5 1.3 1.2 1.0 1.2 0.9 1.2 1.0 1.1 1.0	15-19 2.7 2.5 2.5 2.4 2.3 2.4 2.5 2.5 2.4 1.9 2.0 1.6 1.5 1.7 1.5 1.6 1.7	20-24 3.6 3.5 3.2 3.2 3.0 2.9 3.4 3.3 3.2 2.9 2.4 2.0 2.2 2.4 1.7	25-29 4.3 3.8 3.2 3.4 3.7 3.4 3.7 3.3 3.0 2.5 6.4 2.5 2.1 1.9	30-34 4.3 4.1 3.7 3.6 3.5 4.0 3.8 3.5 3.5 3.0 3.0 3.0 3.1 3.7 2.3 2.4	5.2 4.8 5.1 4.6 4.2 4.7 4.5 4.6 4.2 4.2 3.4 3.4 3.4	6.1865.6565.0966.014.775.0744.775.044.2
1941 1942 1943 1944 1945 1946 1947 1948 1949	10.4 10.1 10.5 10.0 9.9 9.7 10.0 9.9 9.9 9.8	13.1 11.7 12.1 11.4 10.5 11.5 11.3 10.0 10.0 9.1	1.1 0.9 1.0 1.1 1.0 0.9 0.7 0.8 0.7	1.0 0.8 0.9 0.7 0.8 0.7 0.7 0.6 0.7 0.7	1.3 1.5 1.4 1.3 1.2 1.0 1.1 1.0 0.9	1.9 1.8 1.7 1.5 1.4 1.3 1.3 1.2 1.1	2.0 1.8 1.8 1.6 1.4 1.5 1.4 1.4 1.4 1.0	2.2 2.1 2.1 2.0 1.8 1.7 1.6 1.4	3.2 2.9 3.0 2.7 2.7 2.5 2.4 2.3 2.3 2.2	4.1 4.1 3.8 3.8 3.6 3.8 3.6 3.3
1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 Source	7.3 7.4 7.5 6.7 7.4 4.1 9.9 6.7 7.4 4.1 9.9 6.7 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	10.4 9.6 10.1 9.1 9.6 9.2 10.3 10.4 10.0 10.2 9.8 9.5 9.5 9.7 9.5 9.7 9.5 9.5 8.7 8.6 8.7 8.6 ion But	15.0 15.0 16.4 13.8 15.3 15.3 15.3 13.7 14.2 14.4 14.4 14.4 14.5 14.4 14.5 14.4 14.5 14.4 14.5 14.8 14.9 14.9 15.3 13.7 14.1 14.1 14.9 14.9 14.9 15.3 15.3 15.3 15.3 13.7 14.1 14.0 13.8 14.5 14.9 14.9 14.9 14.9 15.3 16.0	22.1 22.2 24.3 22.5 22.0 24.0 22.6 23.7 23.2 22.5 22.2 23.8 22.5 23.6 21.0 22.1 22.1 22.1 22.1 22.1 22.1 22.1	34.5 35.6 38.3 38.3 38.7 38.7 38.7 34.5 34.5 34.5 35.0 35.1 32.8 35.1 32.8 32.1 32.0 32.2 33.0 35.1 32.0 32.2 33.0 35.1	59.1 60.0 615.2 56.3 576.3 576.3 576.3 576.3 576.3 576.3 577.5 577	91.3 95.0 100.8 90.2 90.9 100.3 92.9 98.9 98.2 91.3 90.6 94.2 88.3 85.6 87.1 91.1 89.8 86.5 89.3 85.8 88.3 85.8 88.3 87.8 88.3 87.8 88.3 85.8 86.5 87.1 97.2 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 88.3 98.9 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.8 98.9 98.8	136.0 146.8 153.4 140.9 150.6 152.1 138.8 137.2 152.6 148.4 1451.2 157.0 155.7 136.2 141.6 137.9 145.4 139.9 145.4 133.7 132.9 126.9 126.9 128.0 128.0	241.5 256.2 271.5 262.4 270.2 256.7 261.0 245.2 247.0 241.2 229.8 249.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 248.4 257.2 256.7 256.7 256.7 261.0	

NUMBER OF BIRTHS IN ONTARIO PER 1,000 WOMEN BY FIVE-YEAR AGE GROUPS

1921-1950

Age										
	15-19	20-24	25-29	30-34	<u>35-39</u>	40-44	45-49			
1921	35.4	150.3	173.4	143.0	98.2	38.8	5.1			
1922	33.7	138.8	165.8	137.8	93.0	38.0	3.8			
1923	31.0	132.1	162.0	134.7	91.3	37.6	3.9			
1924	32.5	133.3	162.4	136.4	90.1	37.9	3.9			
1925	32.6	127.4	158.5	131.2	86.9	35.4	3.9			
1926	30.4	121,1	148.8	125.6	82.3	34.3	3.4			
1927	32.3	122.9	145.0	122.6	80.4	33.4	3.8			
1928	33.3	126.5	143.6	122.8	78.8	32.7	3.1			
1929	34.1	127.9	144.6	117.5	76.1	30.1	3.2			
1930	35.8	133.6	149.2	120.4	77.0	30.9	2.8			
1931	35.7	127.5	145.2	114.9	74.1	28.8	3.4			
1932	33.6	121.7	139.0	109.2	71.8	27.5	3.3			
1933	33.8	112.6	129.4	103.0	67.3	24.9	2.9			
1934	31.9	109.1	124.6	99.6	64.0	24.9	3.0			
1935	32.4	. 111.1	124.3	97.0	63.8	23.7	2.7			
1936	31.7	112.6	120.2	93.6	61.1	22.5	2.1			
1937	31.3	111.3	117.6	92.0	56.9	20.9	2.3			
1938	33.5	121.1	123.4	95.1	58.6	20.9	2.1			
1939	32.6	116.9	119.6	93.2	56.8	19.2	2.2			
1940	35.5	125.1	128.5	96.2	56.5	19.4	1.9			
1941	36.8	133.3	137.3	96.3	55.9	19.1	1.7			
1942	38.5	138.5	143.4	101.2	57.9	19.6	1.9			
1943	36.9	139.7	150.6	106.7	62.7	19.8	1.8			
1944	34.5	128.6	138.0	108.3	63.8	19.9	1.6			
1945	33.8	128.0	135.3	107.7	66.3	21.0	1.8			
1946	40.4	166.9	169.7	123.2	70.0	21.7	2.1			
1947	48.9	192.0	190.2	128.9	71.2	22.6	1.8			
1948	50.7	179.5	180.1	118.8	67.0	21.4	1.8			
1949	52.6	178.0	182.3	118.1	68.3	21.0	1.8			
1950	55.1	176.8	179.7	120.6	67.8	20.4	1.8			
Source:	Dominion B	ureau of S	statistics;	Vital Sta	tistics, 1	950.				

### INVESTMENT

The concept of investment dealt with here is concerned primarily with expenditures on durable physical assets, i.e. on new construction, machinery and equipment, new house building including major alterations, as well as on repair and maintenance of structures, installations, machinery and equipment, by both private persons and public authorities.

The impact of investment expenditures on a country's economy is quite out of proportion to the amounts actually involved. Additions to the productive capacity of a country through net additions of capital equipment or improved techniques or processes, affect employment and incomes both directly and indirectly. They may also exert an inflationary pressure on the price level. This latter effect will depend on the prevailing level of income and employment. If it is low and resources are idle, additional investment will mean an increased volume of employment and income in both investment and consumer industries. However, as a high level of employment of resources is reached, increased investment will lead to competitive bidding for factors of production to induce them to move from one sector of the economy to another. This will result in increased prices for goods and services. Generally, price increases in capital goods industries far exceed those in consumer goods industries.

The fact that investment expenditures react more sharply than other types of expenditure to changes in the economic outlook, also strengthens the impact on the economy.

Repair and maintenance expenditures utilize the same resources as do outlays on new physical assets, and, therefore, also affect income, employment and prices. Such expenditures, although necessary to the proper upkeep of capital equipment, can be delayed to some extent when economic conditions are unfavourable and, therefore, although they do fluctuate, do not react as sharply as capital expenditures.

During 1953 there was a change in the industrial pattern in Ontario, and in Canada as a whole. In 1951 and 1952 there was a definite shift in capital spending towards defence and defence-supporting industries and the development of strategic natural resources, with a resultant pressure on the available supplies of scarce material. Restrictions on certain types of construction were imposed to ensure that defence-related industries could expand as rapidly as possible. By the beginning of 1953 a number of the larger projects had been completed or were nearing completion, the productive capacity of capital goods industries had increased and the supply situation had eased considerably. Principal restrictions on construction were, therefore, removed. The soft spots in the economy in 1953 were the electrical appliance, textile, and farm implement industries.

It is estimated that capital expenditures in Ontario during 1953 will reach a peak of \$2.0 billion. In addition there will be outlays of about \$781 million for repairs and maintenance. Estimates of expenditure are based on intentions stated at the end of 1952. Actual expenditures for 1953 are not yet available.

In manufacturing as a whole, it is expected that capital spending for 1953 will be about seven per cent. lower than the \$492.7 million in 1952, with most of the decline occurring in primary iron and steel products and chemical products.

Capital outlays on utilities are expected to increase by about nine per cent. While trade, finance, and commercial services, for such facilities as wholesale and retail outlets, office buildings and hotels, will probably increase by around forty-five per cent. A ten per cent. increase in expenditures on institutional buildings such as hospitals, churches and universities is expected to make up in part for the backlog brought about by shortages of materials during and after World War II. Housing outlays will probably increase about twelve per cent. and account for approximately seventeen per cent. of total capital expenditure for 1953.

estimated that \$1,277 million (62 per cent.) will be spent on construction work, and the remaining 38 per cent., \$778 million, on machinery and equipment. There will be, in addition, \$781 million spent for repair and maintenance, a slight increase over the previous year. Three hundred and twenty-eight million dollars of this would go for repairs to structures and \$454 million for repairs to machinery and equipment.

Adding expenditures for repairs to structures to those for new construction gives a total of \$1,605 million. Outlays for repairs to existing machinery plus purchases of new machinery are expected to total \$1,231 million.

A number of factors govern the amount and type of investment in any given region of a country. Among these is the general economic condition of the area - a prosperous community or region generally has a high level of investment expenditure. Thirty-eight per cent. of all investment expenditures on capital goods and on repair and maintenance in Canada, occurs in Ontario, while the next most industrialized province, Quebec, accounts for about twenty-two per cent.

The rapid rate of resources development, population growth and urbanization, and industrial expansion are the major factors in Ontario's growing capital expenditure programme.

Growth of population leads to increased investment in order to provide the additional necessary goods and services. Between 1931 and 1953 the population of Ontario has increased by 1,465,000 or 42.7 per cent. and density has increased from 9.45 to 12.66 per square mile. There has also been a noticeable growth in urban population reflecting the industrial and commercial expansion of the Province. In the two decades from 1931 to 1951, the number of people living in centres of 1,000 or more, has increased by 61.2 per cent. and now makes up 70.7 per cent. of the total population, in comparison with 58.7 per cent. in the earlier year. In Canada as a whole, 61.6 per cent. of the population was urban in 1951. Growth in size of urban communities is particularly noticeable in Northern Ontario, where large numbers of people have been attracted by heavy capital investment expenditures made for the development of natural resources in the post-war period. In 1951, 45 per cent. of the population of Ontario lived in centres of 30,000 or over, as compared with 33.3 per cent. in 1931.

The civilian labour force also has increased by 37.6 per cent. over the twenty years from 1931 to 1951. Over this same period, the agricultural sector has declined by 17.7 per cent. and now makes up 13.6 per cent. of the total labour force compared with 22.6 per cent. in 1931. The counter-trend found in the non-agricultural labour force is reflected in the manufacturing industries where over the same period the number of employees has increased by 132.2 per cent. to over 599,000 and is now about 32 per cent. of the labour force. The number of manufacturing establishments has grown by 36.4 per cent. while the gross value of products has risen 542.2 per cent. In real terms production has increased about 400 per cent. Investment in manufacturing is expected to be slightly higher in 1953 than in utilities, \$688.5 million compared with \$682.1 million.

The development of public utilities, however, especially the growth of electric-power generating facilities, has been a major element in recent capital investment expenditure. The \$682 million estimated investment will comprise 24 per cent. of total investment occuring in Ontario. From 1946 to 1952 a total of \$805.1 million has been spent by the Ontario Hydro Electric Power Commission on construction of water generating stations. In 1952, 17.9 billion kilowatt hours of electrical energy were delivered in wholesale quantities to be supplied to consumers. Dependable peak capacity has risen between 1945 and 1953 by 1,768,500 kilowatts. Present construction is especially concentrated on the Sir Adam Beck - Niagara Generating Station #2 which will have an ultimate installed capacity of 1,370,000 kilowatts (1,828,000 horse power) in sixteen units. Estimated cost of twelve units is \$299 million.

Continuing economic development has brought with it a number of benefits including a rising personal income. In 1952, this reached a record of \$6.7 billion, an increase of 8.9 per cent. over the previous year. Per capita personal income has risen 5.1 per cent. over 1951 to reach \$1,409. This increase in income has been achieved in spite of a reduction in the number of hours worked.

There has thus been a considerable rise in hourly earings. There has been also a rise in industrial productivity. This is illustrated by the fact that the average worker in manufacturing industries in Ontario, produced \$4,881 worth of goods per year in 1931, and \$13,471 worth in 1951, an increase of 176 per cent. In real terms this would be an increase of approximately 32 per cent.

It is anticipated that the pattern of investment expenditures begun in 1953, will continue in 1954. In Canada as a whole, year-end estimates put the capital expenditure programme for 1954 at about three per cent. more than the previous record of \$5.7, billion reached in 1953. Such a programme, if realized, would absorb about 23.5 per cent. of the Gross National Product, about the same proportion as in the previous year. It is expected that \$5.8 billion will be spent for capital purposes (66 per cent. on construction and 34 per cent. on new machinery and equipment), and \$2.0 billion for repair and maintenance purposes.

Present indications in the field of international investment, are that both Western Germany and the United Kingdom are interested in Canada and especially in Ontario for long-term investments. The St. Lawrence Seaway and Power project with its effects on the whole economy of Ontario, has particularly attracted them.

Easing of restrictions on the transfer of currency has enabled more British firms to invest in Canada. It is estimated that in 1953 about \$100 million was invested, and there is at present no indication of a decline in 1954. The West German Government is also permitting the transfer of capital to Canada, in cases where a return of dollars can be expected with confidence. Most of the foreign capital invested in Canada, however, comes from the United States. The majority of American investment, especially since the war, has been related to the expansion of the mining and petroleum industries.

### TREND TOWARDS URBANIZATION IN ONTARIO

Centre Size	1931	% of Total	1941	% of Total	1951	% of Total
100,000 and over 30,000 - 99,999 10,000 - 29,999 5,000 - 9,999 1,000 - 4,999	913,626 230,227 391,250 185,831 294,482	26.6 6.7 11.4 5.4 8.6	1,094,056 269,058 379,301 217,809 309,042	28.9 7.1 10.0 5.8 8.2	1,307,751 764,448 463,404 237,963 476,380	28.4 16.6 10.1 5.2 10.4
TOTAL 1,000 AND OVER	2,015,416	58.7	2,269,266	60.0	3,249,946	70.7
TOTAL POPULATION	3,431,	,683	3,787,	,655	4,597	,542

### MANUFACTURING IN ONTARIO

!	Establishments No.	Employees No.	Gross Value of Products \$'000	Employees per 1,000 Population No.
1931 1941 1951 1952 (est.)	9,546 10,250 13,025 ) 13,400	257,601 468,230 599,433 601,000	1,257,450 3,121,757 8,074,731	75.1 123.6 130.4 126.1

Source: The Manufacturing Industries of Canada, By Provinces, Section I, 1951, Department of Trade and Commerce.

### PERSONAL INCOME

	Ontario \$ 000,000	Per Capita	\$ 1000,000	Per Capita \$
1931	1,561	455	3,692	356
1941	2,522	666	5,896	512
1951	6,166	1,341	15,711	1,121
1952	6,714	1,409	17,073	1,183

Source: National Accounts Income and Expenditure 1947-1952, 1926-1950, Department of Trade and Commerce.

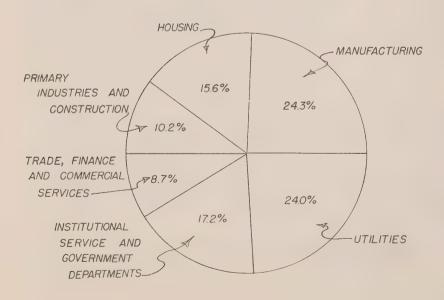
# CAPITAL INVESTMENT, REPAIR AND MAINTENANCE EXPENDITURES IN ONTARIO (Millions of Dollars)

Type of Enterprise	1949	1951	1953(1)
Primary industries and construction industry Manufacturing Utilities Trade, finance and commercial services Housing Institutional service and government depts.	255.1 397.5 434.8 185.9 352.8 243.5	293.9 605.0 540.3 239.0 408.9 349.6	289.6 688.5 682.1 246.5 442.3 487.1
TOTAL	1,869.6	2,436.7	2,836.1

(1) Estimate

Source: Private and Public Investment in Canada Regional Estimates,
Department of Trade and Commerce.

### DISTRIBUTION OF ESTIMATED INVESTMENT IN ONTARIO 1953.



# INVESTMENT EXPENDITURE IN ONTARIO (Millions of Dollars)

			(1)
	1949	1951	1953
Capital Expenditures  Construction Machinery and Equipment	791 506	1,023	1,277 778
Sub-Total	1,297	1,740	2,055
Repairs and Maintenance Construction Machinery and Equipment	268 304	327 370	328 453
Sub-Total	572	697	781
Capital, Repair and Maintenance Construction Machinery and Equipment	1,060	1,350 1,087	1,605 1,231
TOTAL	1,870	2,437	2,836



### ONTARIO'S LABOUR FORCE

The Dominion Bureau of Statistics defines labour force as that segment of the population fourteen years of age and over who are at work, available for work, or temporarily absent from work because of sickness, holidays, short term lay-offs or industrial disputes. Work in this sense refers to effort for which some form of economic remuneration is received. Because of the difficulties inherent in deciding who of the population are available for work, this group is limited to those who are actively seeking work. Statistics relating to the size and composition of the labour force, based on sample surveys, are published monthly by the Dominion Bureau of Statistics. However, a complete tabulation including industry and occupation group classifications, is available only for census years; consequently most of the tables in the section are computed from census data and refer to the week ended June 2, 1951.

The labour force is not a fixed body of persons -- rather it may be pictured as a stream into which most people enter for a longer or shorter period and then depart. The force is augmented by young people, immigrants and temporary workers, and diminished by deaths, retirements, marriages (women), physical incapacity and emigration. It is not possible on the basis of the statistical information available to isolate each of these factors and trace its effect on the size of the force. It is possible, however, to examines the structure of the force from information in the surveys and to draw conclusions from age, occupation group, sex, and employment data. From these conclusions, in turn, it is possible to speculate about the size and composition of the force in the immediate future.

One aspect of the labour force that has received attention from industry and government is the modest increase in the size of the force compared to the increase in total population during the post-war period (1). The labour force has not kept pace with the population, the former increasing only fourteen per cent. over the period while the latter increased twenty per cent. One of the chief reasons for the disparity, of course, has been the high birth rate in Ontario in the post-war years. Consequently the population under fourteen years has increased almost thirty-four per cent. It is important to note, however, that, even neglecting children under fourteen years, the population has increased at a slightly greater rate than the labour force. Those over fourteen but not included in the force, such as housewives, students and retired persons, have increased sixteen per cent. during the period and now form a larger proportion of the adult population than they did immediately after the war.

A study of the age groups in the Ontario labour force reveals some of the important trends that have characterized the period. On the average, persons now enter the labour force at a later age than formerly and retire younger. The middle age groups have increased more rapidly than the total, the older age groups have remained relatively constant and the younger groups have decreased. Those between the ages of fourteen and nineteen have declined from 183,000 in 1946 to 152,000 in 1953, a decrease of seventeen per cent.

The impact of immigration on the labour force is reflected in the increase of the twenty-five to forty-four group which rose twenty-four per cent. during the period, and which constituted forty-six per cent. of the force in 1953 compared with forty-three per cent. in 1946. A numerical decline among those sixty-five and over can be attributed, in part, to the effect of earlier retirements. That there are fewer young people in the labour force may be the result of two factors. Trade school and college education are becoming increasingly populated with the result that that the entrance of young people into the force is postponed. In addition to this, a study of the age groups of the population reveals a "valley" in the teenage population relative to other age groups. This is particularly true of the seventeen to twenty-one group. The birth rate was low during the thirties, which accounts for this difference, and did not rise substantially until the beginning of the war which in turn means that there will be no substantial increase in the younger classes of the labour force for a few years yet.

<sup>(1)</sup> By the term "post-war period" is meant the period June 1, 1946 to June 1, 1953. June 1, 1946 is the earliest date following World War II for which population estimates and labour force estimates are comparable.

The number of women in the labour force has increased since the beginning of the period, but by only nine per cent. compared with seventeen per cent. for men, with the result that women now form a smaller proportion of the labour force than in 1946. The long-run trend, however, has been in the opposite direction. In 1931 the proportion of women was only 18.6 per cent. and in 1941, 21.6 per cent. During the war the percentage reached a peak and since that time has declined slowly. The 1951 figure, 23.6 per cent., was higher than that in 1941, however. It appears likely that this proportion will decrease slowly in the immediate future as the demand for labour eases.

In the main, the increase in Ontario's labour force has been due to immigration rather than an increase in the domestic supply of labour, during the postwar period. The population of the Province increased 804,000 of which only 473,000 was attributable to natural increase. The balance, 331,000, came from net immigration into Ontario. The exact proportion of those people entering the labour force is not known but the available evidence suggests that it was higher than the ratio of the existing labour force to total population. Approximately 55.5 per cent. of the immigrants entering Canada in the period January, 1951 to June, 1953 became members of the labour force. Applying this percentage to the net immigration into Ontario during the post-war period, it appears that roughly 180,000 were added to the labour force. This represents more than three-quarters of the total increment of 224,000 to the labour force in the period. While the net immigration figures are only estimates, they serve to illustrate clearly the sizeable contribution of new Canadians to Ontario's labour force in the post-war period.

A continuation of the present trends toward fewer people in both the young and old age groups, and a smaller proportion of women in the labour force will probably result in a more modest increase in the immediate future. The extent of this increase, of course, will depend on immigration, a factor which has been so important in past growth.

TABLE I - THE POPULATION AND THE ESTIMATED LABOUR FORCE (In Thousands)

		PO	PULATION	N 14 YEAR	RS AND OVI	ER	
Date						Not in	Population
(Nearest	Total		I,	ABOUR FOR	RCE	Labour	Under 14
June 1)	Population	Total	Total	Male	Female	Force	Years
1946	4,093	3,006	1,677	1,260	417	1,329	1,087
1947	4,176	3,084	1,733	1,320	413	1,351	1,092
1948	4,275	3,132	1,770	1,356	414	1,362	1,143
1949	4,378	3,191	1,801	1,375	426	1,390	1,187
1950	4,471	3,242	1,810	1,379	431	1,432	1,229
1951	4,598	3,304	1,852	1,407	445	1,452	1,394
1952	4,766	3,403	1,896	1,444	452	1,507	1,363
1953	4,897	3,444	1,903	1,453	450	1,541	1,453
Per cent.							
Change 1953/	46 +19.6	+14.6	+13.5	+15.3	+7.9	+16.1	+33.7

# TABLE II - ESTIMATED AGRICULTURAL AND NON-AGRICULTURAL LABOUR FORCE (In Thousands)

Date (Nearest	Total Labour	A	AGRICULTURALNON-A				AGRICULTURAL		
June 1)	Force	Total	Male	Female	Total	Male	Female		
1946	1,677	325	272	53	1,352	988	364		
1947	1,733	313	258	55	1,420	1,062	358		
1948	1,770	307	252	55	1,463	1,104	359		
1949	1,801	288	248	40	1,513	1,127	386		
1950	1,810	263	238	25	1,547	1,141	406		
1951	1,852	251	220	31	1,601	1,187	414		
1952	1,896	236	209	27	1,660	1,235	425		
1953	1,903	219	208	11	1,684	1,245	439		
Per cent.									
Change 1953/46	+13.5	-32.6	-23.5	-79.2	+24.6	+26.0	+20.6		

TABLE IIIA - ESTIMATED DISTRIBUTION
BY AGE GROUPS OF THE LABOUR FORCE

Date 1946 1947 1948 1949 1950 1951 1952 1953 Per cent.	Total 1,677 1,733 1,770 1,801 1,810 1,852 1,896 1,903	14 - 19 183 181 186 180 167 170 167 152	20 - 24 218 234 239 248 245 247 252 241	25 - 44 716 749 754 780 791 814 863 886	45 - 64 472 479 499 498 513 524 521 540	65 & over 88 90 92 95 94 97 93 84
Change 1953/46	+13.5	-16.9	+10.6	+23.7	+14.4	-4.5

## TABLE IIIB - ESTIMATED DISTRIBUTION BY AGE GROUPS OF THE LABOUR FORCE

Date	Total	14 - 19	20 - 24	25 - 44	45 - 64	65 & over
1946	100.0	10.9	13.0	42.7	28.1	5.3
1947	100.0	10.4	13.5	43.2	27.6	5.2
1948	100.0	10.5	13.5	42.6	28.2	5.2
1949	100.0	10.0	13.8	43.3	27.6	5.3
1950	100.0	9.2	13.5	43.7	28.3	5.2
1951	100.0	9.2	13.3	44.0	28.3	5.2
1952	100.0	8.8	13.3	45.5	27.5	4.9
1953	100.0	8.0	12.7	46.5	28.4	4.4

### Source:

Tables I, II, and III have been prepared from data published in the monthly labour force surveys of the Dominion Bureau of Statistics. These figures have not as yet been revised to conform with the 1951 census results. Nevertheless the tables illustrate significant trends in the postwar period.

### Unemployment

Tables IVA and IVB illustrate the magnitude and the regional impact of unemployment in Ontario during the post-war period. Table IVA, compiled from data in the monthly labour force survey of the Dominion Bureau of Statistics, shows the total estimated unemployment quarterly, a figure which varies between approximately one per cent. and four per cent. of the labour force. Table IVB, compiled from data published by the Unemployment Insurance Commission, shows applications for employment, consequently these statistics are not comparable to those of table IVA. They serve, however, to illustrate regional unemployment patterns.

TABLE IVA - ESTIMATED UNEMPLOYMENT IN ONTARIO

			,	
		Date ne	arest to	
	Mar. 1	June 1	Sept. 1	Nov. 1
1945				54
1946	57	34	36	34
1947	39	24	19	23
1948	40	23	18	25
1949	55	28	28	36
1950	72	32	22	25
1951	36	19	20	32
1952	55	30	22	31
1953	45	27	19	30

TABLE IVB - MONTHLY APPLICATIONS FOR EMPLOYMENT IN ONTARIO DURING 1953 AND AVERAGED FOR THE PERIOD 1950-53 (In Thousands)

Region		Jan. 1	Feb. 1	Mar. 1	Apr. 1 M	May 1	June 1	July 1	Aug. 1	Sept. 1	0ct. 1	Nov. 1	Dec. 1	
Metropolitan	1953 Average	17.1	23.8	23.6	20.5	15.0	13.0	14.3	12.2	12.4	13.7	14.7	20.3	
Burlington	.1953 Average	0, ω 0 u	10.4	10.4	8.7	7.4	5.9	7.1	6.1	6.4	7.2	8.3	11.9	
Niagara	1953 Average	5.0	0.0	ν. 0.00	4.7	3.4	3.1	2.0	2.8	29.0	N 9.	3.50	8.1	
Lake Erie	1953 Average	0.0	8.0	0.8	0.0	0.0	0.0	00	00	0.0	00.0	0.0 v.o	7.0	
Upper Thames	1953 Average	8.4	4 m	3 60	3.8	3.5	2.5	01 01 01 01	. c.	2.0	2.1	2.3	. w w o o	
Border	1953 Average	6.6	4.00	7.5	6.2	6.6	3.3	3.7	44	8 5	0.00	11.0	9.9	
St. Clair River	1953 Average	1.2	4	9.4.	9.4	1.0	0.0	0.0	00.0	00.0	0.6	0.8	H 0	
Upper Grand River	1953 Average	4.8	w w r	3.00	3.5	2.0	1.6	ы. В. с.	91	1.0	1.7	2.0		
Blue Water	1953 Average	7.0.	6.5	6.6	5.2	3.1	2.2	1.9	1.9	1.7	89.4	2.0	0.4.	
Kawartha	1953 Average	# t	5.5	5.0	4.9	33.0	9.9	0.00	いいい	2.0	3.1	3.2	84	
Quinte	1953 Average	40.	4.8.1	9.4	4.1	0.00	1.90	2.0	1.6	1.6	L.1	2.3	2	
Upper St. Laurence R.	1953 Average	3.3	w w 7. w.		3.2	2.5	1.1	1.6	1.4	1.8	2.6	2.5	2.0	

Dec. 1	₩. ₩.	2.9	3.1	2.0	1.8	4.0	45.2 33.0 37.3 60.7	144.1	45.5 71.0 56.9 96.9	9.19
Nov. 1	3.50	1.5	44	1.1	0.7	2.1	27.7 31.5 48.3	38.0	38.8 52.3 46.7 67.6	51.4
Oct. I	3.7	0	4.0	00	9.0	4.4	51.1 24.9 25.7 38.4	35.0	35.55 45.05 5.03 5.03 5.03	45.2
Sept. 1	w w rv w	0.8	0.0	0.8	4.00	44	23.3 23.3 36.5	33.7	38.7 38.6 47.3 50.3	43.7
Aug. 1	4. m.	0.0	7.1	0.8	0.0	2.7	48.5 29.6 26.7 38.1	35.7	140.3 37.6 53.2 47.2	9.44
July 1	3.5	0.0	1.3	1.1	0.6	1.5	51.0 33.1 36.7 41.5	9.04	50.8 41.0 60.4 50.8	50.8
June 1	3.5	4.4	2.6	4.4.	0.6	99	831.83 140.3	42.5	58.6 39.6 71.9 49.9	55.0
May 1 Jur		0.0	2.9	20.4	0.0	5.0	69.4 38.9 41.6 51.7	4.05	89.5 51.6 98.5 68.7	77.1
Apr. 1	7.00.	4.4	4.0	2.6	4.1.	7.9	82.1 47.2 50.7 64.9	61.2	102.8 61.9 116.2 96.5	4.46
Mar. 1	7.7	3.4	3.0	3.0	1.1	0.9	86.6 52.4 54.8 67.4	65.3	95.0	95.5
Feb. 1	7.7	3.4.	0, H 17.00	0.0	0.0	4.5	75.0	63.5	94.8 72.0 110.0 101.4	9.46
Jan.1	2.5	9.4	2.3	7.4	0.0	4.6	58.5 47.2 36.6 148.8	147.8	70.3 55.8 86.7 83.7	74.1
	1953 Average	1953 Average	1953 Average	1953 Average	1953 Average	1953 Average	1946 1947 1948 1949	1946-49	1950 1951 1952 1953	1950-53
								Average		Average
Region	Ottawa Valley	Highlands	Clay Belt	Nickel Range	Sault	Lakehead	ONTARIO			

Source: Unemployment Insurance Commission

	Service	2,551 3,076 113,276	22,533	13,031 5,006 8,025	3,131 1,290 1,841	23,366 1,418 15,841 3,107	17,507 13,427 4,080	4,027
	Finance	33, 467 501 608 32,358	3,276 574 2,702	1,530	427 126 301	3,933	2,483	1,775
	Trade	2,164 2,830 2,830 104,183	3,580	9,751	2,951 1,037 1,914	16,394 2,629 10,850 2,915	15,653	3,277
	Trans- porta- tion*	41,492 719 1,151 39,622	6,800 1,113 5,687	5,094 1,659 3,435	1,053	8,374 2,435 4,910 1,029	6,935	2,008
S - 1951	Construc-	1,759 1,759 38,953	8,815 1,415 7,400	6, 494 2,903 3,591	1,539	7,416 1,091 5,185 1,140	6,737 4,909 1,828	2,488
INDUSTRY GROUPS	Utilities	11,493 292 305 10,896	1,578	2,542 672	264 128 136	1,693	1,820	410 410
BY	fanufac- turing	209,702 6,995 8,151 194,556	74,159 14,586 59,573	40,290 15,665 24,625	4,618 2,113 2,505	29,855 3,807 18,773 7,275	49,287 41,223 8,064	9,743
OUR FORCE	Mining	840 75 85 680	236 97 139	286	225	11.7 8 36 73	137	9/9
N OF LABOUR	Fishing and Trapping	34 4 27	VIM M	4	282 146 136	128 121 5 2	412 175 237	515
DISTRIBUTION	Forestry and Logging	289 128 8 269	25   26	47 31 16	130	23	22 22	임임
VA -	Agri- culture	14,361 2,699 3,486 8,176	6,541 2,839 3,702	6,724 4,816 1,908	10,634 2,892 7,742	19,444 5,623 7,592 6,229	15,171 7,012 8,159	5,590
TABLE	Total Labour Force	587,680 17,644 21,646 548,390	144,810 28,763 116,047	86,578 36,268 50,310	25,593 9,039 16,554	111,572 20,985 67,925 22,662	117,397 87,441 29,956	28,331

Region 1 Metropolitan Halton Peel York

Region 2 Burlington Brant Wentworth

Region 3 Niagara Lincoln Welland Region 7 St. Clair River Lambton

Region 6 Border Essex Kent

Region 5 Upper Thames Elgin Middlesex Oxford

Region 4 Lake Erie Haldimand Norfolk

Service	2,595 7,115 4,633	21,510 1,794 640 2,805 4,463	13,200 1,446 4,653 3,649 1,550	9,540 6,523 941 1,701	7,979 688 681 1,009 2,921
Finance S	2,953	1,540 188 87 370 238 657	1,685 161 611 537 193	1,216 560 485 79	705 67 51 74 74 262 251
Trade	12,403 2,545 6,727 3,131	11,006 1,414 1,414 2,773 2,790 1,905 4,294	10,507 1,098 3,721 2,992 1,375	8,184 3,284 3,488 716	5,422 512 439 1,693 2,066
Trans- porta- tion	1,538 1,211 2,074 1,253	5,919 659 208 1,107 801 3,144	1, 299 1, 426 1, 683 639 639	4,218 1,257 2,414 247 300	3,182 307 285 1,029 1,006
Construc- tion	5,871 1,146 3,281 1,444	6,271 845 353 1,148 2,845	5,477 1,999 1,336 717	1,687 1,799 1,799 530	3,184 248 386 471 997
ilities	908 230 194 194	1,415 162 80 319 181 673	1,039 109 286 275 205	851 118 118 144	105 105
Manufac- turing Ut	45,122 5,862 30,021 9,239	18,034 2,924 1,80 5,228 2,126 7,276	36,068 16,121 10,740 2,349 2,769	15,894 6,017 7,529 1,451 897	14,499 983 631 1,545 3,713 7,627
Mining	322 332 338	123 24 14 15 16 17	217 10 138 138 13	234 75 132 26	F11 4 2 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fishing and Trapping	4!! ひひ	158 23 1 28 24 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	77 00 00 FT 00	148 21 29 28 80	214719
Forestry and Logging	20 254	36 36 118 1178	354 1004 131 131 67	557 346 143 5	131 44 51 51
Agri- culture	16,194 6,176 3,939 6,079	32,911 6,071 2,731 8,390 7,827 7,892	16,189 2,876 4,242 2,458 2,905 3,708	11,581 2,846 4,064 2,413 2,258	2,779 2,779 2,862 1,795 3,057 2,426
Total Labour Force	103,093 20,330 56,043 26,720	100, 409 14, 405 5, 247 22, 507 18, 807 39, 443	89,933 11,062 33,803 23,406 10,024 11,638	25,950 25,993 27,534 6,707	49,177 5,723 5,565 6,324 14,028
Region 8	Upper Grand River Perth Waterloo Wellington	Region 9 Blue Water Bruce Dufferin Grey Huron	Region 10 Kawartha Durham Ontario Peterborough Victoria Northumberland	Region 11 Quinte Frontenac Hastings Lennox and Addington Prince Edward	Region 12 Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont

65,189 53,206 2,001 979 8,178 825	8,013 490 2,382 3,319 1,822	7,027	6,259	3,597	10,809 2,572 1,363 6,874	379,129	
5,178 1,558 209 79 271 61	200 18 120 276 86	653 354 299	537 537	<u>297</u> <u>297</u>	846 128 82 636	61,728	The second secon
19,127 13,880 1,643 736 2,385 483	4,514 214 1,055 2,174 1,071	5,273 2,997 2,276	4,159 308 3,851	2,506	7,264	267,267	
8,952 5,832 1,455 1,107	4,708 1444 784 2,818	3,024	3,835	2,768	10,222 1,890 885 7,447	127,421	
10,416 6,011 976 652 2,095 682	4,200 349 1,139 1,877	2,280	3,182 259 2,923	1,607	4,617 873 705 3,039	127,494	
2,476 1,311 238 66 840 21	1,187 117 309 566 195	969	1440 78 362	295	918 199 56 663	30,704	
21,618 10,941 3,394 1,703 5,177	7,526 1,746 3,272 1,808	7,859	8,493	9,800	12,791 2,462 1,449 8,880	615,358	
315 900 4 420 138 138	219 21 11 171 16	12,403	11,239	733	3,010 1,474 651 885	30,653	
13 1 1 30	103 7 25 67	388	165 100 65	127	416 125 73 218	2,259	1,1,1,1,1
907	1,880 181 267 1,013 419	1,062	2,461	1,558	9,356 1,835 478 7,043	23,030	
18,214 4,957 2,905 3,037 4,729 2,586	4,166 369 652 1,518	3,686	2,696	1,354	3,107 412 1,159 1,536	201,482	
154,169 102,024 13,064 7,969 25,751 5,361	37,448 2,616 8,533 17,293 9,006	48,706 30,793 17,913	44,048 3,722 40,326	24,921	64,126 13,324 7,717 43,085	1,884,931	
Region 13 Ottawa Valley Carleton Lanark Prescott Renfrew Russell	Region 14 Highlands Haliburton Muskoka Nipissing Parry Sound	Region 15 Clay Belt Cochrane Timiskaming	Region 16 Nickel Range Manitoulin Sudbury	Region 17 Sault Algoma	Region 18 % 19 Lakehead and James Bay Kenora Rainy River Thunder Bay	TOTAL	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	154,169	13   13   14   15   15   15   15   15   15   15	13   13   15   15   15   15   15   15	13   13   13   14   16   16   16   17   17   18   18   18   18   18   18

\* includes communication

TABLE VB - PERCENTAGE DISTRIBUTION OF LABOUR FORCE BY INDUSTRY GROUPS - 1951

Service	20.4	15.7	13.9	12.3	21.1 21.2 23.5 13.8	15.1	14.3
Finance	7/0/0/0 0/0/000	0 0 m	25.1	7.1.1	8. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1.00.1	1.1
Trade	18.8	12.5	11.4	11.6	14.8	13.5	11.6
Trans- porta-	7.7	7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6,000	44.6	17.6	0/2/0	7.1
Construc- tion	- 00 00 F	107.	9.7.8	6 7 6 C	01.7. N	6.7.8	8 8 8 8
Utilities	0.1110	T 0 7.	0 0.0	0.4.0	11 d d d d d d d d d d d d d d d d d d	2.1	1.5
Manufac- turing	36.0	51.6	0.74 0.74 0.74	18.2 23.7 15.3	26.9 18.3 32.3	42.4 47.7 27.1	34.6
Mining	00000	0000	m a +	1 5.0	0.1	0.3	0 0.3
Fishing and Trapping	1 1 1 1	1 1 1	1   1	1.11	0.00	4.000	7.0
Forestry and Logging	0.1	1 2 1	1 0	0000	1 0	- I - C	,   1
Agri- culture	21.501	3.00.0	13.5	42.0 32.4 47.2	17.6 27.0 11.3 27.7	13.1	19.9
ر دور دور	Metropolitan Halton Peel York	Region 2 Burlington Brant Wentworth	Region 3 Niagara Lincoln Welland	Region 4 Lake Erie Haldimsnd Norfolk	Region 5 Upper Thames Elgin Middlesex Oxford	Region 6 Border Essex Kent	Region 7 St. Clair River Lambton

	Region 12 Upper St. Lawrence 26.6  Dundas 49.1 Glengarry 52.5	Froncenac Hastings 14.9 Lennox and Addington 36.3 Prince Edward 34.1	()	Ontario Peterborough 10.6 Victoria Northumberland 32.2		Dufferin 52.8 Grey 37.7 Huron 41.9 Simcoe 20.3		loo ngton	Region 8 Upper Grand River 15.8		
	000000	000 000		19.00		2000		1 1 0		roresury and e Logging	+ 0 0 0
2 0	0.0	1.000	0.0		00.1	000	0 0 0	, š š		and and Trapping	
,000 Hund	0 000		4.00	1907	2.00	111000	0.0	0.1	0.1	Mining	
24.7	2000	27.6 21.8 13.5	23.3	24.0	37.2	23.5	18.2	34.8	44.0	Manufac- turing U	
010	8 0 0 0 0	9.1.0	200	2000	2000	7 0 5	4 1 1 2 2	6.0	0.0	Utilities	
2000	7.77	-97-8	1.00	2007.	1000	0 10 10 F	6) NO.	- 0, m	5.5	Consturc- tion	
10.78	180010	8 m 4	4.00	N 5 5 7 C	4 W n	0 0 m H	0.914	4.7	7:4	porta-	Trans-
11.4	88.11	12.8 10.5 10.8	12.3	13.8	11.8	12.5	10.2	12.1	12.1	Trade	
7.70	7:11.001.1	00 CL TL	80 00 0	1 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	والمرو		1.3	1.0	0/0/	Finance	
16.1 21.1 15.5	16.4	25.7	28.2	15.7	113.2	12.6	21.7	12.8	12.9	Service	
						12.6 23.9 30.4	22.7	12.8	14.0	Ω1	

ت در سره ۱۳۰۰ در سره ۱۳۰۰	Ottawa Ja Ottawa Valley Carleton Lanark Prescott Renfrew Russell	Region 14 Highlands Haliburton Muskoka Nipissing Parry Sound	Region 15 Clay Belt Cochrane Timiskaming	Region 16 Nickel Range Manitoulin Sudbury	Region 17 Sault Algoma	Region 18 Lakehead Kenora Rainy River Thunder Bay	TOTAL	
Agri- culture	22.44 38.66 1.99.4	11.3 14.1 7.7 7.9 18.3	1.01	31.00	5.5	41.27.21	10.8	
Forestry and Logging	01000000	100001	1011	νω ν - π τ	66.3	13.9	1.2	
Fishing and Trapping	1 1 1 0 1	00.00	0 0 0 0 0	4.0	6.0	1.0	0	Accompany of the Control of the Cont
Mining	000000 011 w w w w	000000000000000000000000000000000000000	25.8 24.6 27.8	28.0	0.00.00	4.8 111.1 8.5 2.1	1.6	
Manufac- turing U	20.02 20.02 20.02 20.02 7.05 7.05	2000 2000 2000 2000 2000 2000 2000 200	16.3	19.5 20.5	39.8	20.2 18.6 19.0	33.0	T
Utilities	6 4 4 0 8 0 8 4 4 4 6 8 6 8 8 8 8 8 8 8 8 8 8 8 8 8	w = w w a a   w o w a	0110	0.100	2:1	1.67	1.6	
Construc- tion	66.8 6.55 7.68 7.59 7.59 7.59	113.4	t + · · · · · · · · · · · · · · · · · ·	7.777.3	5.00	20.00	6.8	Mary Mary Mary Mary Mary Mary Mary Mary
Trans- porta tion*	1 1 1 1 1 1 m	12.9	m 0.80	ω   υ ω ω   ο ω	2.11.	16.1	6.8	
Trade	112 123 123 123 123 123 123 123 123 123	22.01 2.02.01 2.03.01 2.03.01	12.8	0.00	10.2	11.5	14.3	Management and the state of the
Finance	4/20040	4.00.11	4.11.1	1.3	2.1.2	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.3	
Service	42.8 15.7 12.8 31.9	21.6 18.8 28.1 19.5	14.6 13.8 16.0	14.4	14.6	17.1	20.3	

\* Includes Communication

TABLE VIA - DISTRIBUTION OF THE LABOUR FORCE BY OCCUPATION GROUPS 1901-51

Occupation		1901	1911	1921	1931	1941	1951
All Occupations	1000	754.2 100.0	991.0	1,117.1	1,345.6	1,455.1	1,884.9
Agricultural	1000	306.4 40.6	307.0 31.0	294.1 26.3	304.8 22.7	270.3 18.6	203.3
Fishing & Trapping	1000	2.0° 0.3°	3.7 0.4	2.0 <sup>c</sup> 0.2 <sup>c</sup>	6.3 0.5	6.3 0.4	3.2
Logging	1000	6.2	10.5 <sup>a</sup>	7.9 0.7	9.0 0.7	14.5	17.1
Mining & Quarrying	'000 %	3.9 0.5	16.7 <sup>b</sup>	8.7 0.8	14.8	24.2	21.3
Manufacturing & ) Mechanical ) Construction )	1000 % 1000 %	179.0) 23.7) )	174.8 17.6 53.8 5.4	190.2 17.0 64.2 5.7	224.4 16.7 76.7 5.7	321.7 22.1 77.7 5.3	437.2 23.2 120.3 6.4
Transportation ) & Communication ) Trade & Finance )	'000 % '000	83.1) 11.0) )	58.4 5.9 84.7 8.5	77.4 6.9 113.0 10.1	109.9 8.2 134.7 10.0	113.6 7.8 140.9 9.7	176.2 9.3 199.2 10.6
Service	1000	95.0 12.6	118.9	145.3 13.0	211.8 15.7	250.5 <sup>f</sup> 17.2 <sup>f</sup>	333.2 17.7
Professional	1000	е	36.3 3.7	59·3 5·3	77·3 5·7	88.1 6.1	126.6 6.7
Personal	1000	61.1 8.1	75.8 7.6	69.3 6.2	119.6	146.5 10.1	151.7 8.0
Clerical	1000	27.3 3.6	45.0 4.5	94.8 <sup>c</sup> 8.5 <sup>c</sup>	108.7	139.7 9.6	236.6 12.6
Labourers <sup>d</sup>	1000	50.9	117.4	117.0	143.7 10.7	91.6 6.3	118.3
Not Stated	1000	-	-	2.2	0.8 0.1	4.1 0.3	19.1

a Includes pulp mill employees.

Source of original data: Census of Canada 1951.

b Includes mine and smelter workers except clerical staff.
c Not exactly comparable to other years.
d Includes labourers in industries other than primary.
e Not available.

f Includes Armed Forces.

TABLE VIB - DISTRIBUTION OF WAGE EARNERS
BY THE NUMBER OF WEEKS WORKED

- 1951 -

	TotalPERIOD WORKED IN WEEKS							
Region	Wage Earners '000	<u>- 10</u>	10-19	20-29	' <u>30-39</u>	40-49	<del>50+</del>	Total
Metropolitan	526.6	3.3	2.6	4.2	4.6	7.0	78.3	100.0
Burlington	129.9	3.8	3.0	4.4	4.5	7.0	77.3	100.0
Niagara	75.0	4.5	3.5	4.9	4.9	6.3	75-9	100.0
Lake Erie	15.8	6.9	5.7	8.3	10.3	14.1	54.7	100.0
Upper Thames River	87.3	4.4	3.4	4.6	5.1	8.0	74.5	100.0
Border	95.8	1+.0	3.6	5.1	6.2	11.1	70.0	100.0
St. Clair River	21.1	5.0	4.1	5.5	5.3	8.6	71.5	100.0
Upper Grand River	81.7	3.6	3.1	4.5	4.9	8.3	75.6	100.0
Blue Water	61.7	5.2	4.2	6.6	8.3	11.3	64.4	100.0
Kawartha	68.6	3.9	3.4	5.4	5.9	8.5	72.9	100.0
Quinte	51.8	4.3	4.0	6.2	6.8	7.7	71.0	100.0
Upper St. Lawrence R.	34.0	4.4	3.6	6.3	7-4	9.1	69.2	100.0
Ottawa Valley	128.2	3.1	2.5	4.4	5.0	7.5	77.5	100.0
Highlands	28.9	5.2	4.7	9.0	9.8	14.4	56.9	100.0
Clay Belt	41.5	4.7	3.1	6.8	8.6	12.7	64.1	100.0
Nickel Range	38.5	4.0	3.0	5.4	6.3	10.1	71.2	100.0
Sault	21.8	4.8	3.6	7.0	7.8	10.0	66.8	100.0
Lakehead	56.4	4-4	4.1	8.4	9.5	10.6	63.0	100.0
ONTARIO	1,564.7	3.9	3.1	5.0	5.6	8.3	74.1	100.0

Source: Census of Canada, 1951

TABLE VIIA - INDEX NUMBERS OF EMPLOYMENT BY INDUSTRY DIVISIONS - ONTARIO (1949 : 100)

Industry Division	Average	Average 1948	Average 1949	Average 1950	Average 1951	Average 1952	Average 1953
Forestry	160.9	148.3	100.0	99.8	139.6	126.6	98.0
Mining	93.4	97.9	100.0	104.1	110.1	115.6	112.7
Manufacturing	95.7	99.3	100.0	101.6	108.6	108.8	114.5
Construction	86.9	95.6	100.0	108.6	123.0	127.9	119.9
Transportation, Storage and Communication	94.1	97.8	100.0	100.6	105.9	109.6	111.0
Public Utility Operatio	n 71.5	84.8	100.0	103.0	107.5	112.1	115.3
Trade	88.5	95.7	100.0	104.6	110.6	113.5	116.6
Finance, Insurance and Real Estate	92.0	95.9	100.0	106.6	118.0	124.4	122.6
Service	92.7	97.8	100.0	103.6	106.1	108.9	109.8
Industrial Composite	94.7	98.9	100.0	102.7	110.4	112.0	114.6

## TABLE VIIB - WEEKLY EARNINGS OF EMPLOYEES BY INDUSTRY DIVISIONS - ONTARIO

Industry Division	Average 1947 \$	Average 1948	Average 1949	Average 1950	Average 1951 \$	Average 1952 \$	Average 1953 \$
Forestry	35.26	39.48	42.47	42.17	49.54	57.28	59.02
Mining	44.32	49.62	52.83	55.04	60.41	66.16	69.66
Manufacturing	37.61	42.20	45.72	48.40	53.80	59.04	62.01
Construction Transportation, Storage and Communication	37.20	41.21	43.76	45.96	52.57	58.78	62.14
	41.42	45.56	48.55	49.97	54.58	57.71	62.26
Public Utility Operation	on 43.78	47.98	50.82	53.51	58.95	64.77	69.51
Trade Finance, Insurance, and Real Estate	31.89	34.95	37.50	39.59	43.78	46.95	49.31
	39.52	41.51	43.55	45.03	47.57	50.62	53.65
Service	23.06	26.58	28.22	30.17	32.47	34.93	37.64
Industrial Composite	37.16	41.26	44.36	46.58	51.69	56.36	59.39

Source: Employment and Payrolls, Dominion Bureau of Statistics, Ottawa.

### AGRICULTURE

Ontario, with 10 per cent. of the area and 14 per cent. of the improved land under crops in Canada, was the source in 1952 of 23 per cent. of the net income from farming operations in the Country. The importance of Ontario farming in relation to farming in the rest of Canada is often overlooked. In a consideration of agriculture in Canada, wheat from the Prairie Provinces, because of its role in opening up the largest new section of Canada, its importance as a source of national income, and its character as an export product, is inclined to dominate. At the same time, the importance of manufacturing in Ontario results in a popular indentification of the Province with industrialization.

The climate, land forms, and soils of southern Ontario are generally favourable to agriculture. Only a few areas, such as the steep slopes of the Niagara Escarpment; the rough morraines and shallow soils of the limestone plains in parts of the Upper St. Lawrence and Ottawa Valley Regions; and the Canadian Shield, are definitely unfavourable. Some areas close to the large lakes are free from frost hazard and also have deep loamy, easily-worked soils.

### Historical Development of Agriculture

Initial development of much of what is now farm land in Ontario occurred in terms of industries other than agriculture. The territory was first entered by explorers interested in the fur trade. Later, lumbering in the Ottawa Valley provided the impetus for settlement in the area.

The first attempt at farming in Ontario can be traced back to a settlement formed by Champlain near Kingston. Very little was accomplished agriculturally, as the settlers' time was largely occupied by wars with the Indians.

Farming was begun along the Niagara River in 1779. Even then, however agricultural settlement was related to factors such as Loyalist migration after the American Revolution, and government interest in the strategic military value of the area. The intensive development of the agricultural resources of Upper Canada really began in the early years of the 19th century. By 1851, over 85 per cent. of the population of Ontario was rural and predominantly engaged in agriculture. By 1881 the maximum density of rural population had been reached, and the area in farms at that time was 92 per cent. of farm acreage in 1951. The chief concern of the early farmers was to clear the land and establish homes. The pioneer farming economy was self-sufficient. The simple wants of the household were met by domestic manufacture or through the sale of potash, the first cash crop of the area.

The importance of agriculture in Ontario increased as its character changed from a self-sufficient, subsistence industry to a cash crop industry. During the first half of the 19th century, wheat from Ontario became an export commodity. Grain entered the United States freely under the Reciprocity Agreements, but when they ended in 1866, Ontario was left dependent on the overseas market. Within twenty years the western prairies began to open up, producing a hard wheat which crowded Ontario wheat from the market. The clay lands were turned to grass and the cattle industry replaced grain in Ontario. One-third of the wheat acreage of Canada was in Ontario in 1900, compared to one-thirty-sixth in 1950. From 1871 to 1951 cattle in Ontario increased from 1.4 million to 2.5 million head.

### Position of Agriculture in the Economy of Ontario

During the period in which the emphasis in Ontario agriculture changed from wheat to cattle farming, the position of agriculture in the economy of the Province as a whole was also changing. Emerging from an era dominated in turn by the fur trade and lumbering, agriculture in Ontario had replaced these industries both in number of persons employed and in value of production. During the early years of the 20th century, however, manufacturing began to exceed agriculture in net value of production. In the 1920's manufacturing in Canada as a whole accounted for about 42 per cent. of the net value of Canadian production, whereas agriculture was responsible for about 38 per cent. Although figures are not available, the margin between manufacturing and agriculture in Ontario at this time was probably wider. The relative importance of manufacturing has since increased, but no other industry aside from manufacturing compares favourably with agriculture on the basis of net value of production.

#### Commercialization

A factor in the economic importance of Ontario agriculture as measured by cash income, is its degree of commercialization (that is the extent to which farming is carried on for cash remuneration rather than for satisfying the needs of the farmer directly). Although self-sufficient farming is still carried on to some degree in parts of Ontario, it is confined mainly to the more remote areas of the Clay Belt and Lakehead Regions. Farming on the cash crop basis is highly developed near the metropolitan areas of Toronto, Hamilton, Ottawa and Windsor, having sprung up in these areas in response to heavy demands for milk and other dairy products, meats, eggs, fruits and vegetables. Specialized chash crops have also been developed in particularly favourable areas, including tobacco in Norfolk County in the Lake Erie Region, early vegetables in the Border Region, apples and canning crops in the Niagara Region.

Elsewhere in the Province, a basic cash crop may be combined with other types of farming on a small scale to satisfy family needs. This permits more flexibility in adjusting to business fluctuations than in the Prairie Provinces, for instance, where farming is almost completely specialized. Specialization that does exist at present in Ontario agriculture is the type which develops only at a comparatively late stage. It is the result of adaptation to the special physical and economic character of each region rather than to a general scarcity of labour and capital or a heavy dependence on a distant foreign market as in the earlier stages of development. A tendency to practice mixed farming, to combine several types of farm enterprises, some of which are more lucrative or more reliable than others, has become general in the mature agricultural areas of Ontario. This represents an attempt to avoid wide fluctuations in farm income, and to conserve fertility.

### High Return Per Acre

The value of products sold per farm in Ontario is high. Almost half of Ontario's farms sold over \$2,500 of farm produce in 1950 compared to only one-fifth of the farms in Quebec. Gross value of products per farm even exceeds that in the highly commercialized area of the Prairie Provinces.

An acre of farm land in Ontario produces more in dollars than an acre elsewhere in Canada. The produce carries a higher value in relation to bulk, and is sold in more easily accessible markets. The extension of agriculture in Ontario appears to have reached its territorial limits with present farming techniques and demand for food, so that emphasis is on intensive development of land rather than expansion into new teritories.

One reason for the higher gross value of products per acre in Ontario is the emphasis on dairying and livestock raising rather than grain growing. Grains such as wheat, oats, barley, rye, and flax contributed in 1952 only 2.7 per cent. of the total cash income from farm products in Ontario, compared to 37.6 per cent. for the whole of Canada. Of the land sown in field crops in Canada, 4 per cent. lies in Ontario. Nine per cent. of this is in wheat, compared to 41 per cent. for the whole of Canada. On the other hand, the bulk of Ontario's farm income is derived from livestock and livestock products, which provided \$494 million or 70 per cent. of a total cash income from farm products of \$715 million in 1952. In Canada as a whole, 47 per cent. of farm cash income came from livestock and livestock products. In 1951, 30 per cent. of the cattle in Canada were on Ontario farms, and one-third of the total milk production came from Ontario. The emphasis on livestock in the Province is also shown by the proportion of acreage under crop devoted to cultivativated hay in 1951, 40 per cent. compared to 17 per cent. for the whole country, and mixed grains, 13 per cent. compared to 2 per cent.

Specialty crops such as tobacco, soybeans, and sugar beets which produce more dollars per acre than other crops, are also proportionately more important to Ontario than to the rest of Canada. Almost all the tobacco produced in Canada comes from Ontario, where it contributed, in 1952, nine per cent. of farm cash income. Of the acreage of tobacco, soybeans, and sugar beets sown in Canada, 91.9 per cent., 99.6 per cent., and 31.4 per cent., respectively, is in Ontario.

Ontario are generally smaller than in the rest of Canada. In 1951, the average area per farm in the Province was 139.3 acres, less than half the average of 279.3 for Canada. In other important farming areas, Quebec and the Prairie Provinces, the average farm size was 125 acres and 498 acres respectively. The proportion of improved land (1) to farm area in Ontario was 61 per cent., higher than in either of these zones. The proportion of improved land to farm area in Quebec was 53 per cent., in the Prairie Provinces, 58 per cent. Of Ontario farms at the 1951 Census, 75 per cent. had between 10 and 129 acres of improved land; 17 per cent. had over 129 acres. In Quebec 84 per cent. had between 10 and 129 acres, and 10 per cent. had more than 129 acres. In the Prairie Provinces the proportions were 25 per cent. and 71 per cent. Area of improved land is actually more indicative of the extent of farming operations than total farm land.

### Farm Labour Force

In terms of labour force employed in the Province, agriculture ranks well behind manufacturing, with 11 per cent. and 33 per cent. of the total labour force in 1951 respectively engaged in these industries. Both service and trade enterprises also employed more workers than agriculture. In Canada as a whole, agriculture ranked third, employing 6 per cent. of the nation's labour force. The character of Ontario agriculture is indicated by employment in each category. Forty-six per cent. of the labour force employed at the 1951 Census in Ontario agriculture were occupied in mixed farming, 21 per cent. in dairy farming, 10 per cent. in grain and hay farming, and 8 per cent. in stock raising.

There is an average of 31 farm acres per farm resident in Ontario, compared to 62 farm acres in Canada as a whole. In comparing labour force to farm acreage, acres per farm worker in 1951 were 103.6 for Ontario, 86.2 for Quebec, 368.2 for the Prairie Provinces, 117.3 for the Maritimes, and 170.0 for British Columbia. As pointed out in the section on Labour Force in this Survey, the population employed in agriculture in Ontario has declined both in numbers and in proportion to the total labour force in the last eight years. Factors involved in this change are both sociological and economic. Reinforcing the attraction of the cities has been the increased mechanization of farms, and the shift to more remunerative types of farming which have permitted this decrease without an accompanying decline in value of production.

The basic unit for farm production in Ontario is still the individual family. Wages paid to farm labour comprised 12.2 per cent. of farm operating expenses in 1952, compared to 15.3 per cent. in the Prairie Provinces, 10.5 per cent. in Quebec, where farm labour is even more completely provided by the farm family, and 24 per cent. in British Columbia. In specialized crop areas dependence is placed on seasonal hired help. In 1951, 82 per cent. of Ontario farms were owner-operated, compared to 77 per cent. for Canada. Six per cent. were tenant-farmed and 11 per cent. part tenant-and part owner-operated in Ontario, compared to 7 per cent. and 14 per cent. for Canada.

### Farm Capital

The value of farm capital in Ontario amounted to \$2,824.4 million in 1951. The distribution of farm values has changed during the period from 1900 to 1951. In 1951, 59 per cent. of farm value was in agricultural land, a decrease from 80 per cent. in 1901. On the other hand, value of implements and livestock on Ontario farms increased from 6 per cent. and 14 per cent. of the total to 12 per cent. and 29 per cent. respectively, in the same period.

The average value of occupied farm land, including buildings, in Ontario was estimated for 1952 at \$92 per acre. Only British Columbia exceeded Ontario in this respect. The average for Canada was \$48 an acre. Since the Prewar period (1935-39), mean value of occupied land in Ontario has doubled. This trend reflects the relative changes in price levels of farm products and of things which farmers buy. Since before World War II, the prices of Ontario agricultural products have increased more than those of commodities and services used by farmers.

(1) Improved land includes all land brought under cultivation and fit for the plough. It comprises the area under field, garden, orchard, and nursery crops for harvest, as well as area in summer fallow, cultivated pasture, barnyards and laneways, and improved land lying idle.

### Emphasis on Domestic Market

The marketing aspects of agriculture in Ontario also differ from those in other farming regions. Agricultural produce from Ontario has a considerably narrower market range than that of western Canada. With a high degree of urbanization in the Ontario population, town and city consumers provide the predominant source of demand. It is difficult to estimate the amount of farm produce marketed outside of the country by individual provinces. Some indication of the proportion of Ontario agricultural products which find markets outside of Canada may be gained from the following statistics:

### Value of Farm Products Sold Compared to Canadian Exports of Farm Origin - 1951

		from Sale Products	Proportion Ontario of Canada	Canadian Exports	Proportion Cdn. Exports of Sales
	Ontario \$'000	Other Provinces \$'000	%	\$'000	%
Field crops & vegetable prods. Wheat Oats Tobacco	169,213 24,126 5,661 54,417	952,901 671,313 66,238 2,794	15.1 3.5 7.9 95.1	894,120 441,043 53,899 16,693	79·7 63·4 75·0 29·2
Animals & animal products Cattle and calves	593,335 161,387	966,161 336,208	38.0 32.4	348,033 114,030	22.3 22.9
Dairy products, eggs and honey	197,590	318,715	38.3	24,847	48.1

Important Canadian exports coming from Ontario are livestock and dairy products. (Cheese and bacon are two products for which Ontario farmers have had to depend heavily on international markets.) Other Ontario specialties, and a large proportion of livestock and dairy products, sell almost entirely locally or nationally. This dependence on home rather than international outlets tends to provide more stable markets for Ontario products than are enjoyed by producers of world staples.

Ontario's export markets have been re-shaped since the Second World War. After the war, international exchange difficulties made it impossible for some pre-war customers to re-enter the market, at least on a pre-war scale. Great Britain, France, Germany, and the Union of South Africa bought proportionally less of Ontario's agricultural products in 1952 than in 1939. To-day the most important customer for Ontario farm products is the United States, which takes about three-quarters of all Ontario's agricultural exports. Grade and purebred dairy and beef cattle, dressed meats, seed grains, canned and fresh fruits and vegetables are the most important items exported to the United States. These products are produced to meet specifications of the American market. For instance, tuberculosis-free cows were first produced in Ontario to satisfy United States import requirements. Recent controls imposed by the American government on agricultural imports have had some effect on Ontario products. Import restrictions on skim milk, previously a large item on the American market, have caused a change to production of casein, another milk product, which the United States is buying heavily.

Great Britain, before the war Ontario's chief customer for farm exports, has been largely confined by exchange difficulties to cheese and bacon imports from the Province. Cheese exports to Britain have also been severely reduced, however, from 63 million pounds in 1950 to two million pounds in 1952. The problem resulting from this reduction is discussed in the survey of the Quinte Region, one of the most severely affected, elsewhere in this book. Latin American countries, France, Belgium, and Holland also import Ontario farm products.

#### Dependent Industries

Aside from the position of agriculture as an industry itself in the economy of Ontario, the role which agriculture plays in supplying raw materials used in manufacturing must be considered. In 1951 about 26 per cent. of all Ontario manufacturing firms were engaged in working on agricultural products, mainly from Ontario farms. Slaughtering and meat packing, flour and feed milling, cheese and butter making, fruit and vegetable canning are all important industries in Ontario. The largest of these is slaughtering and meat packing, in gross value of production, the fourth manufacturing industry of Ontario in 1951. Fruit and vegetable preparation, butter and cheese making, and flour milling rank 11th, 12th, and 13th, respectively. The flour and feed industries utilize grain from outside the Province, but other food processing industries depend almost entirely on raw materials produced within Ontario. Other manufacturing industries dependent on agricultural goods include the making of bread and other bakery products, the manufacture of biscuits and confectionery, the brewing industry, the manufacture of tobacco and tobacco products, and the tanning industry. Together, industries processing Ontario farm products were responsible in 1951 for about one-fifth of the gross value of manufacturing production in the Province. In addition, a number of large industries, such as automobile and furniture manufacturing, use agricultural products as a comparatively small proportion of the raw materials going into their products. The industries themselves are so large, however, that the total farm

### The Farm Population as a Market

Another important aspect of agriculture in the economy of the Province is the market for the products of urban manufacturing which it creates. Not only do farmers require consumer goods, they are purchasers of producer goods of a type and to an extent different from the urban population. Agricultural machinery fence wire, tile, stable fencing, prepared feeds, and artificial fertilizers all depend entirely, or almost entirely, on the farm market. In addition, commercial and other services are related to agriculture. Farm products require railway, road and water transportation. Agricultural products filling 288,000 cars were loaded on railways in the eastern division which includes Ontario, Quebec and the Maritimes, in 1952, and ll per cent. of the freight revenue for the area came from this source. The marketing of farm goods makes an important contribution to the industrial life of the Province.

Aside, therefore, from the importance of agriculture as indicated by the proportion of labour force, value of production, net income, and capital investment directly involved, the very fact that Ontario farmers use modern production methods which involve capital expenditure, and that their products for the most part enter commercial channels, means that the influence exerted by agriculture on other sections of the economy is considerable.

As a result of its importance agriculture has been a stabilizing influence in the Province during periods of economic decline. The demand for agricultural commodities has continued when demand for other goods was shrinking. Agencies engaged in transporting and distributing goods and interested in volume depend increasingly on agriculture in prolonged periods of declining industrial production.

### Comparison of Agriculture in the Economic Regions

The vast area of the Province of Ontario leads to wide variations in climate and land forms, and therefore in types of agriculture. Most of the agricultural area is confined to the southern part of the Province where the climate is moderated by the proximity of the Great Lakes and where the soil is generally fertile. The area of southern and eastern Ontario is by far the most important agricultural region of the Province. In terms of estimated net income per farm, the Lake Erie, Upper Thames, Upper Grand River, Metropolitan, and Border Regions are the top five, in that order. These regions are all in southwestern Ontario. Here there are several large sandy tracts, the most notable in Norfolk, east Elgin, south Oxford, and west Brant Counties, now being extensively used in tobacco growing. The soils of part of the lake plains area of the Border and St. Clair River Regions have a high organic content and are well adapted to the growing of cash crops. The whole of the Upper Thames Region, particularly Oxford County, is an important dairying

region. The narrow strip of land surrounding the western end of Lake Ontario, protected by the Niagara Escarpment and favourably influenced by the large body of water, enjoys a long growing season and is largely devoted to fruit and vegetable growing. The Niagara and Burlington Regions, containing this area, rank first and third in value of tree fruits produced, sixth and fifth in vegetables.

Another important agricultural area includes parts of the Quinte, Upper St. Lawrence, and Ottawa Valley Region. Handicapped by drainage problems in the growing of field crops, these Regions emphasize dairy farming and cattle raising. The Upper St. Lawrence, Quinte and Ottawa Valley Regions are the first three producers of cheddar cheese in Ontario. The Ottawa Valley and Quinte Regions rank third and fifth in butter production, after the Blue Water and Upper Grand River. In the Ottawa Valley and sections of the Upper St. Lawrence Region away from the river, the emphasis has shifted to beef cattle raising, both for slaughter and as breeding stock for the American market.

Less intensively developed areas with agricultural potentialities lie within the Clay Belt Region. The Little Clay Belt in the District of Timiskaming, because of its longer growing season and drainage developments, is more productive than the Great Clay Belt in the Districtof Cochrane. Farming is diversified with potatoes as one of the best cash crops. The area is unable to compete economically with southern Ontario, however, and remains dependent on local mining and lumbering towns for markets. Income per occupied farm, estimated at \$1,160 for 1950, is lower than in any other Region in the Province.

Most of the agricultural land in the Lakehead Region is in the Thunder Bay District, within a few miles of the lakehead cities, and here dairying is important. There is a small pocket of farm land around Nipigon and another at Upsala, about seventy miles northwest. Agriculture in northern Ontario, however, remains a minor industry. In the Highlands, Clay Belt, Nickel Range, Sault, and Lakehead Regions together, less than 14 per cent. of the total population live on farms. Even of these, only a small proportion are full-time farmers. In the Highland Region farming may be a sideline to the tourist trade, and further north lumbering or mining often provides the chief source of income for part-time farmers. The agricultural areas are small, farm land making up only 1.4 per cent. of the total area. Only 31 per cent. of the farm land is improved.

In general, there is great diversity in the importance and type of agriculture in the various economic regions. Differences in soil, climate, topography, and proximity to markets are decisive factors.

TRENDS IN AGRICULTURE IN ONTARIO

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ıtem	non	1001	1711	1361	1207	1741	7027
pulation Rural population Proportion-rural of total Escriptation of rural population	N N N N N N N N N N N N N N N N N N N	1,246,969 57.1 n.a.	1,198,803 L7.4 n.a.	1,227,030 41.8 n.a.	1,335,691 38.9 785,550 58.8	1,449,022 35.3 694,684 47.9	1,944,316 40.1 678,043 36.8
Proportion of farms operated by owner	No.	204,054	212,108	198,053	192,174	178,204	149,520
Total area in farms  Proportion-areas in farms of total area  Average area per farm  Area of improved land  Proportion - improved land of total farm area  Proportion-field crops of improved land  Proportion-cleared pasture of improved land	a & a a a a a a a a a a a a a a a a a a	21,349,524 104.6 13,266,335 62.1 65.3 n.a.	22,171,785 104.5 13,653,216 61.6 71.2 22.8	22,628,901 114.3 13,169,359 76.5 25.8	22,840,898 118.986 13,272,986 69.1	22,387,981 9.6 125.6 13,363,361 59.7 64.8	20,880,054 9.0 139.3 12,693,250 60.8 65.0
** values-Total Proportion-land of total value Proportion-buildings of total value Proportion-buildings & machinery of total value Proportion-livestock of total value	million assaura	532.5 57.6 22.6 14.1	1,223.7 29.9 25.7 26.4 18.0	1,688.9	1,397.7 41.9 34.8 10.9	1,189.6	2,548.0

Sources: Dominion Bureau of Statistics, 1951 Census of Canada. Ontario Department of Agriculture.

AGRICULTURAL PRODUCTION IN ONTARIO

1952	21,560 67,560 67,560 1,191 1,191 1,277 11,277 11,276 6,157 6,157 6,157 131,238	2,388 372 4,22 4,23 3,248 9,590	20,403 219,700 219,700 219 21,937 26,897
1361	20,648 82,218 7,339 1,505 1,136 7,151 7,127 7,337 7,337 3,843	3,511 1,348 1,348 2,563 6,151 9,765	202,224 202,224 261 2,466 1,755 24,738
1950	31,233 96,186 8,325 1,856 1,471 1,168 21,696 6,280 3,323 110,610	2,861 1,139 1,139 3,507 8,928	2,897 (270,270 (184,311 (2,807 (2,213 (23,460
1945	20,828 53,879 9,3879 1,249 3,025 3,025 1,060 1,2,722 8,429 8,429 842 842 842	550 41 911 47 6,146	117,630 117,201 162,281 2,894 724 1,979 28,648
1940	23,400 86,554 15,519 1,557 3,796 34,770 34,770 11,256 11,255 6,916 6,916 6,916 13,056	2,350 88 1,115 1338 5,865 10,966	100,004 125,202 560 2,518 1,998 22,901
1930	20,226 97,482 20,911 2,676 1,581 1,581 1,581 36,013 6,673 6,673	1,911 197 22 28 896 3300 1,300 4,309	64,898 81,323 79,309 79,309 1,607 1,134 1,662 22,560
1920	22,972 169,171 16,660 2,350 3,190 25,712 2,712 23,962 57,316 4,859	9,188 296 16 16 965 324 10,832	3,235 92,785 83,817 705 2,882 1,129 1,614
1900	30,310 89,693 16,910 2,358 1,874 1,058 21,476 84,059 3,133	12,645 105 111 517 405 n.a.	131,968 - 617 2,429 1,737 1,772 9,541
TIND	1000 bu. 1000 tons		1000 lbs. 1000 lbs. 1000 los.
PRODUCT	Wheat Oats Barley Rye Buckwheat Flax Mixed Grains Dry Peas Dry Beans Potatoes Field Roots Hay Sugar Beets Soy Bans	Apples Cherries Grapes Peaches Pears Plums & Prunes Raspberries Strawberries	Creamery Butter Cheddar Cheese Processed Milk Products Horses Cattle Sheep Swine Poultry
	FIELD	COMMERCIAL	DAIRY PRODUCTS LIVESTOCK ON HAND

n.a. not available Sources: Ontario Department of Agriculture. Dominion Bureau of Statistics.

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	Freducts Products	40.00 10.00	0000	414	1.0	1040	5.00
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	of Cattle	21112	1.2	0.50	0.17.0	11.7	8 0 0 0
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OF GROSS FARM REVENUE PRODUCTS - 1950	Ilam2 &	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.9	51.8	10.0	4.40	2.1.
OF GROSS PRODUCTS - 1950	Tree stin19	10.6	2.0.7	48.2 43.6 4.6	2/1.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.50
	ealdadaga√ &	20.5	3.7	5.5.1	0.1.0	3.6	35.5
REGIONAL DISTRIBUTION BY SELECTEI ONTARIO	Rocesses	20000	8,50	0:1	43.9	25.0	3.7
GIONAL	Hay & Forage Crops Potatoes;	2440	2.1.2	2.1.5	800 0 100 1	71.44	2.7
E	enisht) &	WI0 4.8	1100	0.5	1.0.1	11.2	13.5
		Region 1 - Metropolitan Halton Peel York	Region 2 - Burlington Brant Wentworth	Region 3 - Niagara Lincoln Welland	Region 4 - Lake Erie Haldimand Norfolk	Region 5 - Upper Thames Elgin Middlesex Oxford	Region 6 - Border Essex Kent

	Region 7 - St. Clair River Lambton	Region 8 - Upper Grand River Perth Waterloo Wellington	Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	Region 11 - Quinte Frontenac Hastings Lennox and Addington Frince Edward
enisio %	200	41.11	14.00.00.00.00.00.00.00.00.00.00.00.00.00	# H H H H O O O O O O O O O O O O O O O	00000
Hay & Forage Crops	11.2	N 1 3 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	14.8 13.0 17.0 17.0	10.01	70110
Potatoes, Moots & Other Field Crops	71.4	0000	000000000000000000000000000000000000000	0.3	0 1 1 1 1
səldstəgəV &	25.7	0.00	4.00 0.3	W 00000	7.8
Tree Stinife	4.4	00000	1.002.1	100 H	1.0
Lism2 & stiur4	9.0	0000	000 000	0001000 000000	8 1 .00
Greenhouse & Mursery Products	0.0	3.4	1.0000	1.8	0.3
≈ Cattle	41.2	113.4	2007000	01001	8.11.10
S Dairy Products	616	2 mm 2 m	111.3 0.0 0.0 0.0 0.0 0.0	8   1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20011 2011
& Poultry &	5.7	14.3 4.2 4.2	116 126 126 126 126 126 126 126 126 126	1000000	11.0
ewine es	000	6.35	7.000.1.	41.000.00	1.000.01
Horses, & Sheep & IcoW	0.0	88.7 8.9 9.6	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	44.00.00.00.00.00.00.00.00.00.00.00.00.0	#10110 810010
& Forest & Maple Products	00.0	010.40 0.00 0.00 0.00	20.400	000110	91.00
-Tu7 gairsəd & elsminA	2.0	13.7 1.81 1.82 1.83 1.75	1.000.4	W01000 F60000	3.7

		F-11				
Fir- Batraed RantaA	801100	1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1   1   1	7.00	000
Forest & Maple Products	ONOHONO	21.1 5.3 0.6 13.7	11.11	8 M 4	4140	7.7.
Horses, Sheep & Wool	8 2000000	0.111.0	40000	0.001	m 0 0	0.7
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Ponltry & Eggs	8 110011 110000	1100010	0.0000	0.00	0000	7.00
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əlttel	4 1 1 0 0 1 0 0 0 0 0 0 0 0	00001140	4 10000	0000	1000	4.00
Products & Wursery	18 011:11	000000	1 1 1 1 1	1   1 - 1	1 1 1	1   1
LLemS stiur¶	8 000 000	1.00	0.1.0	0.1	0.2	4.00
Tree Etiuifs	8 110 00 11 9	000	1 1 1 1 1	1 1 1	1 1 1	1 1
Vegetables	8 0 0000	3.8	0 100	0000	1.0	0.0
Roots & Other Field Crops	N N I	100 000 I	000 100	000	0.0	0.1
Porstoes, Forage Crops Hay &		12.0 4.0 1.0 0.0 0.0	010010	0 m d	1.00	6/6
snisad	8 000000 FISHER 11.00	W W W H B G	0.00	0.3	000	000

Region 12 - Upper St. Lawrence Dundas

Glengarry Grenville Leeds Stormont Region 13 - Ottawa Valley Carleton

Lanark Prescott Renfrew Russell Region 16 - Nickel Range Manitoulin

Sudbury

Region 17 - Sault Algoma

Region 15 - Clay\_Belt Cochrane Timiskaming

Region 14 - Highlands Haliburton

Nipissing Parry Sound

Muskoka

,861 ,282 ,834 ,183 ,183

Fur- bearing Animals	86	2 4 4 A A	100.0
Forest & Maple Products	BR	15.0	100.0
Mool Sheep & Horses,	.86	101010	100.0
Swine	26	0.1	100.0
Poultry & Eggs	PE	0.08	100.0
Dairy	88	4.000	100.0
eltteO	82	0.0	100.0
Products & Mursery Products	PE	0.0	100.0
Small stiurT	88	4 0 0 0	100.0
Tree Eruits	25	1 1 1	100.0
Vegetables	PE	0.2	0.00.0
Potatoes, Other Field Crops	BR		100.0
Hay & Forage Crops	₽€	1012	100.0
Grains	₽¢	0.5	100.0
		ead	
		- Lakeh iver Bay	
		Region 18 - Lakehead Kenora Rainy River Thunder Bay	(1) Total
		ы В	Tot

(1) Gross Farm Revenue of Selected Products:

0	80,769, 80,769, 5,730, 6,251, 1,866,
	Poultry & Eggs Swine Horses, Sheep & Wool Forest & Maple Products Furbearing Animals
	\$ 11,951,220 5,702,529 8,213,195 132,276,760 116,165,288
	Tree Fruits Small Fruits Greenhouse & Nursery Products Cattle Dairy Products
Gross raim nevenue or percess recent	tay & #1,227,214  fay & 7,022,255  otatoes, Roots & 57,669,484  other Field Crops 12,150,343
Gross raim neve	Grains Hay & Forage Crops Potatoes, Roots & Other Field Crops
~	

Note: Percentages have been rounded and may not add to totals and sub-totals

Source of Original Figures: Census 1951

# CASH INCOME FROM THE SALE OF FARM PRODUCTS ONTARIO 1952 (Preliminary)

	Cash Income from Sale of Farm Products \$'000	Product as Proportion of Total Cash Income	Ontario as Proportion of Canadian Income
Total grains, seeds and hay  Wheat Oats Barley Rye Flax Corn Clover and grass seed Hay and clover	36,240 12,822 4,719 1,420 334 362 13,502 2,776 305	5.1 1.8 0.7 0.2 - 0.1 1.9	3.4 1.7 5.0 0.9 1.4 1.4 98.8 30.6 23.0
Fruit and vegetables Potatoes Vegetables Fruits	86,883	12.2	46.9
	28,967	4.1	39.0
	44,370	6.2	65.0
	13,546	1.9	31.8
Specialties Sugar beets Tobacco	68,373	9.6	84.2
	4,616	0.6	31.2
	63,757	8.9	96.0
Animals and animal products  Cattle and calves  Dairy products  Hogs  Sheep and lambs  Wool  Poultry  Eggs Fur farming  Honey	493,648	69.1	38.1
	107,384	15.0	32.5
	136,807	19.1	35.9
	132,862	18.6	39.6
	2,980	0.4	29.0
	522	0.1	25.4
	60,294	8.4	52.0
	47,434	6.6	45.2
	2,793	0.4	24.6
	2,572	0.4	50.0
Auxiliary products  Maple products  Forest products	15,832	2.2	17.1
	1,261	0.2	15.3
	14,571	2.0	17.3
Miscellaneous farm products	13,922	1.9	24.7
TOTAL, ALL PRODUCTS	714,898	100.0	25.7

Source: Dominion Bureau of Statistics Memorandum, Farm Cash Income 1952.

## NET INCOME OF FARM OPERATORS FROM FARMING OPERATIONS IN ONTARIO, 1950 - 52

<u> Item</u>	1950 \$'000	\$ 1951 \$ 1000	\$1952 \$1000
Cash income from farm products	679,757	790,034	714,898
Income in kind-produce consumed on farm where grown, plus rent for farm house	115,439	130,949	131,710
Value of changes in physical volume of grain and livestock on farms at year end	30,429	54,266	21,711
GROSS INCOME	825,625	976,149	868,319
Operating expenses and depreciation	363,814	399,745	413,785
NET INCOME OF FARM OPERATORS FROM FARMING OPERATIONS	461,811	576,404	454,534

# ESTIMATED NET FARM INCOME PER OCCUPIED FARM IN ONTARIO BY REGIONS

<u>Region</u>	Occupied Farms 1951 No.	Estimated Net Farm Income 1950 \$'000	Estimated NET Average Income Per Occupied Farm
1. Metropolitan 2. Burlington 3. Niagara 4. Lake Erie 5. Upper Thames 6. Border 7. St. Clair 8. Upper Grand River 9. Blue Water 10. Kawartha 11. Quinte 12. Upper St. Lawrence 13. Ottawa Valley 14. Highlands 15. Clay Belt 16. Nickel Range 17. Sault 18. Lakehead	8,577 5,131 5,538 6,027 13,314 10,629 4,646 11,458 24,528 12,716 9,536 9,581 12,795 3,949 3,787 2,590 1,333 3,785	29,450 15,740 10,751 27,989 53,718 35,953 14,862 43,737 71,506 40,125 25,565 27,480 34,871 6,468 4,393 4,068 1,814 4,728	3,434 3,068 1,941 4,644 4,035 3,383 3,199 3,817 2,915 3,155 2,681 2,868 2,725 1,638 1,160 1,571 1,361 1,249
TOTAL	149,920	453,217	3,023

Sources: Dominion Bureau of Statistics, 1951 Census of Canada.
Ontario Department of Agriculture.

# FARM OPERATING EXPENSES AND DEPRECIATION CHARGES IN ONTARIO, 1950 - 52

<u> Item</u>	1950 \$'000	1951 \$'000	1952 \$1000
Taxes Gross rent Wages paid to labour Interest on indebtedness Feed and seed purchased through commercial channels Tractor expenses Truck expenses Automobile expenses for farm business Engine and combine expenses Machinery repairs Fertilizer Fruit and vegetable supplies Repairs to buildings Miscellaneous	23,660 15,622 38,973 7,404 116,834 15,848 9,124 19,236 910 11,515 16,994 11,177 15,172 19,809	27,327 16,567 43,552 7,890 115,490 18,172 11,276 22,602 954 11,742 19,929 11,556 22,342 21,361	29,704 15,935 44,001 8,084 114,757 20,516 11,996 22,353 1,002 12,247 22,590 11,690 25,317 20,599
TOTAL OPERATING EXPENSES	322,278	350,760	360,791
Depreciation on buildings and machinery	41,536	48,985	52,994
TOTAL OPERATING EXPENSES AND DEPRECIATION	363,814	399,745	413,785

Source: Dominion Bureau of Statistics, Quarterly Bulletin of Agricultural Statistics January-March 1953.

# INDUSTRIES ENGAGED IN PROCESSING FARM PRODUCTS ONTARIO - 1951

	Estab- lish- ments No.	Employees No.	Salaries and Wages \$'000	Cost of Materials \$'000	Gross Value of Production \$'000
Dairy products Fruit and vegetable preparations Flour and feed milling Prepared stock and poultry feeds Bread and other bakery products Biscuit Prepared breakfast foods Slaughtering and meat packing Sausage and sausage casings Leather tanning Brewing Wine Tobacco and tobacco products	537	9,379 10,269 3,246 2,546 14,379 2,239 1,107 8,073 451 3,466 2,970 492 548	22,412.7 20,084.0 7,894.6 5,844.2 30,872.6 4,491.5 3,303.9 24,185.5 1,061.0 9,039.8 10,475.0 1,530.1 1,327.9	138,953.5 75,844.5 127,988.3 62,425.4 49,277.8 12,057.3 9,959.1 304,088.2 4,781.7 38,510.6 18,224.3 3,786.9 3,080.7	185,997.4 136,547.3 147,866.4 77,021.1 103,398.4 27,265.4 21,219.5 355,623.7 7,556.5 49,752.9 64,262.4 8,899.6 6,851.8

Source: Dominion Bureau of Statistics.

# ANNUAL PRODUCTION AND UTILIZATION OF MILK IN ONTARIO

			PROPORTION	OF TOTAL MI	LK PRODU	ICTION
	Total				Fed to	
	Milk		Sold in	Farm-Home	Live-	Used in
Year	Production	Total	Fluid Form	Consumed	Stock	Manufacture
	'000,000 lb.	%	%	%	%	%
1935 1940 1945 1950 1951 1952	5,228.8 5,785.8 6,033.0 5,465.6 5,441.0 5,492.5	100.0 100.0 100.0 100.0 100.0	20.8 20.9 25.9 29.0 29.5 29.1	8.7 8.7 8.2 9.9 9.6	4.3 4.0 3.3 4.2 4.3 4.1	66.3 66.4 62.6 56.9 56.6 57.3

			PROPORT	ION OF MIL	K USED IN	MARKOT MOTORIES	
	Total					Concentrated	
	Used in		Dairy	Creamery	Cheddar	Milk	Dairy
Year	Manufacture	Total	Butter	Butter	Cheese	Products	Products
1001	'000,000 lb.	%	%	%	%	%	%
1935	3.465.6	100.0	13.0	57.0	24.4	4.0	1.5
1940	3,840.3	100.0	8.8	53.2	29.2	6.9	1.9
1945	3,775.6	100.0	4.8	48.2	34.0	10.2	2.9
1950	3,108.9	100.0	4.4	51.8	25.2	12.3	6.3
1951	3,079.1	100.0	4.3	51.1	23.9	14.2	6.5
1952	3,147.8	100.0	2.8	58.7	17.7	13.7	7.0

Percentage figures have been rounded and do not necessarily add to 100.0. Source of Original Figures: Dominion Bureau of Statistics.

# CLASSIFICATION OF FARM LABOUR BY TYPE OF AGRICULTURE ONTARIO - 1951

	No. of Employees	Type of Agriculture as Proportion of Total	Ontario as Proportion of Canada
Agriculture  Bee keeping Dairy farming Fruit farming Fur farming Grain and hay farming Mixed farming Nurseries and greenhouses Potato farming Poultry farming Stock raising Sugar beet farming Tobacco farming Vegetable farming Agricultural services Experimental and university farms Other agriculture	201,482 386 43,117 5,578 412 20,017 92,022 2,229 103 2,177 15,213 334 9,735 5,828 3,696 542 93	3.0 1.8	24.4 49.9 31.3 46.6 20.0 9.8 23.5 50.0 6.8 35.3 53.6 24.2 96.6 36.8 23.7 15.7
TOTAL	1,884,941	-	35.7

Source: Dominion Bureau of Statistics, 1951 Census of Canada.

# FARM POPULATION AND AGRICULTURAL LABOUR FORCE IN ONTARIO AS AT JUNE 1st, 1951

Geographical Distribution and Relationship to Provincial Totals, by Counties and Regions.

<u>Region</u>	Farm Population	of Total Population	Agricultura Labour	Proportion F Region of Ag 1 Provincial Agricultural Labour Force	ricultural of Total Labour Force
Metropolitan Halton Peel York	34,967 8,395 11,256 15,316	2.7 19.1 20.2 1.3	14,361 2,699 3,486 8,176	7.1 1.3 1.7 4.1	2.4 15.3 16.1
Burlington	21,654	6.4	6,541	3.2	4.5
Brant	12,232	16.8	2,839	1.4	9.9
Wentworth	9,422	3.5	3,702	. 1.8	3.2
Niagara	28,477	13.4	6,72 <sup>1</sup> 4	3·3	7.8
Lincoln	17,507	19.6	4,816	2·4	13.3
Welland	10,970	8.9	1,908	0·9	3.8
Lake Erie	29,095	42.9	10,634	5.3	41.6
Haldimand	10,855	45.0	2,892	1.4	32.0
Norfolk	18,240	42.7	7,742	3.8	46.8
Upper Thames	59,181	21.4	19,444	9.7	17.4
Elgin	16,591	29.9	5,623	2.8	26.8
Middlesex	23,554	14.5	7,592	3.8	11.2
Oxford	19,036	32.4	6,229	3.1	27.5
Border	53,292	18.0	15,171	7.5	12.9
Essex	26,350	12.1	7,012	3.5	8.0
Kent	26,942	34.0	8,159	4.0	27.2
St. Clair River	19,415	25.9	5,590	2.8	19.7
Lambton	19,415	25.9	5,590		19.7
Upper Grand River	51,393	20.9	16,194	8.0	15.7
Perth	18,420	35.0	6,176	3.1	30.4
Waterloo	14,479	11.5	3,939	2.0	7.0
Wellington	18,494	27.6	6,079	3.0	22.8
Blue Water	98,661	36.5	32,911	16.3	32.8
Bruce	18,799	45.5	6,071	3.0	42.1
Dufferin	8,130	55.8	2,731	1.4	52.0
Grey	24,084	40.8	8,390	4.2	37.3
Huron	. 22,754	46.2	7,827	3.9	41.6
Simcoe	24,894	23.4	7,892	3.9	20.0
Kawartha	55,170	23.1	16,189	8.0	18.0
Durham	9,472	31.5	2,876	1.4	26.0
Ontario	14,571	16.7	4,242	2.1	12.5
Peterborough	9,786	16.1	2,458	1.2	10.5
Victoria	9,282	34.2	2,905	1.4	29.0
Northumberland	12,059	36.0	3,708	1.8	31.9
Quinte	44,309	24.8	11,581	5.7	17.3
Frontenac	10,445	15.8	2,846	1.4	10.9
Hastings	17,230	23.2	4,064	2.0	14.8
Lennox & Addington	9,057	46.3	2,413	1.2	36.0
Prince Edward	7,577	40.8	2,258	1.1	33.6

		Proportion Farm	Agricultural	Proportion Pr Region of Agr Provincial	ricultural
	Farm	of Total	Labour	Agricultural	
Region	Population	Population	Force	Labour Force	
Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	43,351 8,197 9,351 6,468 11,026 8,309	31.4 51.8 52.8 37.9 28.4	12,919 2,779 2,862 1,795 3,057 2,426	6.4 1.4 1.4 0.9 1.5	26.3 48.6 51.4 28.4 21.8 13.8
Ottawa Valley Carleton Lanark Prescott Renfrew Russell	59,770 13,802 9,705 10,341 16,709 9,213	15.4 5.7 27.4 40.4 25.0 52.2	18,214 4,957 2,905 3,037 4,729 2,586	9.0 2.5 1.4 1.5 2.3 1.3	11.8 4.9 22.2 38.1 18.4 48.2
Highlands Haliburton Muskoka Nipissing Parry Sound	20,116 1,944 2,929 8,352 6,891	18.2 25.3 11.9 16.5 25.2	4,166 369 652 1,518 1,627	2.1 0.2 0.3 0.8 0.8	11.1 14.1 7.6 8.8 18.1
Clay Belt Cochrane Timiskaming	19,623 11,664 7,959	14.7 13.9 15.9	3,686 1,880 1,806	1.8 0.9 0.9	7.6 6.1 10.1
Nickel Range Manitoulin Sudbury	14,578 4,528 10,050	12.1 40.4 9.2	2,696 1,167 1,529	1.3 0.6 0.8	6.1 31.4 3.8
Sault <sub>.</sub> Algoma	6,625 6,625	10.3 10.3	1,354	0.7	. <u>5.4</u> 5.4
Lakehead Kenora(1) Rainy River Thunder Bay	18,366 3,762 5,884 8,720	11.0 9.6 26.6 8.3	3,107 412 1,159 1,536	1.5 0.2 0.6 0.8	4.8 3.1 15.0 3.6
TOTAL	678,043	14.7	201,482	100.0	10.7

<sup>(1)</sup> Includes Patricia Portion Note: Because of rounding percentage figures may not add to totals or sub-totals.

Source of Original Figures: Dominion Bureau of Statistics, 1951 Census of Canada.

### FARM LAND IN ONTARIO - 1951

-	Occupied	Proportion Farm of	Improved	Proportion Improved
	Farm Land acres	Total Area	Farm Land acres	of Farm Area
Region 1 - Metropolitan	864,684	78.8	662,342	76.6
Halton	204,579	88.1	153,398	75.0
Peel	256,801	85.6	201,822	78.6
York	403,304	71.4	307,122	76.2
Region 2 - Burlington	456,061	81.1	354,198	77.7
Brant	223,402	82.9	174,392	78.1
Wentworth	232,659	79.4	179,806	77.3
Region 3 - Niagara	334,058	72.6	272,750	81.6
Lincoln	178,614	84.1	151,440	84.8
Welland	155,444	62.8	121,310	78.0
Region 4 - Lake Erie	623,799	86.9	482,952	77.4
Haldimand	278,378	89.1	228,445	82.1
Norfolk	345,421	85.1	254,507	73.7
Region 5 - Upper Thames	1,611,643	92.4	1,215,783	75.4
Elgin	421,379	91.4	316,526	75.1
Middlesex	730,459	92.0	526,170	72.0
Oxford	459,805	93.9	373,087	81.1
Region 6 - Border	929,567	89.4	827,161	89.0
Essex	375,636	83.0	343,327	91.4
Kent	553,931	94.3	483,834	87.3
Region 7 - St. Clair River	613,215	85.2	479,739	78.2
Lambton	613,215	85.2	479,739	78.2
Region 8 - Upper Grand River	1,413,752	93.0	1,161,765	82.2
Perth	515,333	95.9	452,528	87.8
Waterloo	291,789	88.4	237,154	81.3
Wellington	606,630	93.0	472,083	77.8
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	3,601,014	81.9	2,451,321	68.1
	749,196	70.9	536,719	71.6
	327,762	91.9	236,885	72.3
	963,068	88.1	564,203	58.6
	783,556	94.5	615,350	78.5
	777,432	73.0	498,164	64.1
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	1,996,926	62.7	1,141,367	57.2
	323,765	80.4	204,770	63.2
	441,391	80.9	290,967	65.9
	358,766	39.6	175,623	49.0
	477,508	55.3	237,367	49.7
	395,496	84.2	232,640	58.8
Region 11 - Quinte Frontenac Hastings Lennox and Addington Prince Edward	1,734,258 502,907 651,131 361,891 218,329	49.4 49.1 43.8 48.3 87.5	747,067 166,534 264,544 168,155 147,834	43.1 40.6 46.5 67.7
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	1,378,126	81.7	797,150	57.8
	226,963	92.4	176,967	78.0
	264,383	86.4	161,722	61.2
	227,642	76.8	125,379	55.1
	426,616	74.1	188,070	44.1
	232,522	88.2	145,012	62.4

	Occupied Farm Land acres	Proportion Farm of Total Area	Improved Farm Land acres	Proportion Improved of Farm Area
Region 13 - Ottawa Valley Carleton Lanark Prescott Renfrew Russell	2,310,764	60.2	1,169,568	50.6
	473,644	78.1	308,235	65.1
	529,069	72.6	174,516	33.0
	271,068	85.7	218,952	80.8
	828,056	43.0	300,702	36.3
	208,927	80.2	167,163	80.0
Region 14 - Highlands	876,216	9.1	230,686	26.3
Haliburton	78,349	8.2	18,780	24.0
Muskoka	132,678	13.1	33,663	25.4
Nipissing	276,062	5.7	91,985	33.3
Parry Sound	389,127	14.0	86,258	22.2
Region 15 - Clay Belt	629,803	1.7	249,418	39.6
Cochrane	333,405	1.0	124,489	37.3
Timiskaming	296,398	7.9	124,929	42.1
Region 16 - Nickel Range	574,898	4.6	168,681	29.3
Manitoulin	290,154	28.5	73,141	25.2
Sudbury	284,744	2.5	95,540	33.6
Region 17 - Sault	222,995	1.8	87,187	39.1
Algoma	222,995	1.8	87,187	39.1
Region 18 - Lakehead	708,275		194,115	27.4
Kenora (1)	117,420		28,226	24.0
Rainy River	312,699		90,294	28.9
Thunder Bay	278,156		75,595	27.2
TOTAL	20,880,054	9.0	12,693,250	60.8

### (1) Includes Patricia Portion

Source: Dominion Bureau of Statistics, Census 1951.

#### MINING

### Metallic Minerals

Ontario's mineral output, worth \$453,412,427 in 1952, was about one-third of the mineral wealth of Canada, and greater than that of any other province. This value of production represented an increase of 0.3 per cent. compared with 1951, whereas total value rose about 2.6 per cent. for Canada as a whole. Most of this value has been accounted for by metals since 1905. Approximately 81.6 per cent. of Ontario and 57 per cent. of Canada's mineral production is of metals (Ontario metal mining is about one-half of all metal mining in the country). Proportions shift from year to year but generally remain close to an average figure. Other mineral products in Ontario, 1952, included structural materials with 14.6 per cent. of the Provincial mining total, non-metallic minerals (2.9 per cent.), and fuels (less than one per cent.).

Gold was the most valuable metal mined in Ontario from 1921 to 1948 (with the exception of 1944) and is, today, the second most valuable. In 1922 it made up about one-half of all metal value, about three-quarters in 1932, one-third in 1947, and only one-quarter by 1952. The lessening importance of gold is due, partly to the increase in base metal production during the past decade, and partly to the lower price of gold both in relation to other prices, and in absolute terms (from \$38.50 per ounce in 1940 to \$34.82 in 1952). Ontario production is about one-half of the Canadian total. This Province usually mines slightly more gold than does the United States, and considerably more than any nation except the Union of South Africa. (Estimates of Russian production range from 2 - 7 million ounces per year.) In 1952, 2,513,700 ounces worth \$87,540,620 were produced in Ontario.

As is the case with so many other industries in this country, the price of, and demand for, gold is largely determined by factors outside Canada. In 1934, the American Government offered to buy unlimited quantities of gold at \$35.00 per fine ounce (1) instead of at the old price of \$20.67, hoping to end the depression by this means. This stimulated production in Quebec and mining profits everywhere. Gold exports became about one-tenth of all Canadian exports during the middle 1930's but are only about one-thirtieth of them at the present. The abnormally low prices of most raw materials during the depression, undoubtedly gave gold its high ranking place in international trade. Canadian mines sell their gold to the Ottawa mint which releases a small fraction to manufacturers in Canada (191,080 ounces in 1951). Most of the remainder is exported to various countries, generally the United States. At the end of 1952, the American government held about two-thirds of the world's gold reserves (\$23,252 million). Other important holders were: England (\$1,500 millions), Switzerland (\$1,455 millions), Canada (\$885 millions), France (\$573 millions), Netherlands (\$346 millions), and West Germany (\$140 millions).

Since October 1951, mines have been allowed to sell gold on the open markets of continental Europe and Asia. This arrangement has been of little benefit to the mines as prices in these markets are little higher than the American treasury price. While gold prices are steady, the cost of producing it has risen sharply. In 1942, Canadian mines produced gold at an average cost of \$18.32 per ounce. By 1951, this had risen to \$27.70 per ounce. Direct labour costs are the largest component—\$11.47 per ounce in 1942 and \$15.31 per ounce in 1951. It must be remembered that the quality of ore varies greatly from mine to mine, so that average costs may have little relevance in any individual operation.

The value of nickel in 1952 (281,117,072 pounds worth \$151,666,687) while only slightly higher than in 1951, was the greatest in history. The volume of nickel was almost equal to that of the wartime peak years of 1941, 1942 and 1943. Nickel constitutes about one-half of Ontario's metal production value at the present time. For Canada as a whole, the value of gold slightly exceeds that of nickel.

<sup>(1)</sup> Gold, silver, and platinum metals are measured by the troy or fine ounce of 180 grains. The troy pound weighs 12 ounces or 5,760 grains. The conventional English (or avoirdupois) ounce contains 437.5 grains, and the pound weighs 7,000 grains (16 x 437.5). All pounds and tons in this section are avoirdupois, all ounces, troy. The 'grains' referred to were originally of a good grade of wheat.

Ontario was the only province mining nickel in 1952. (The mine at Lynn Lake, Manitoba, opened in October 1953.) It produces about 85 per cent. of the world's supply. It is believed that most of the remainder comes from the Soviet Union's Petsamo Mines. The American Government has recently re-opened its wartime nickel mine at Nicaro, Cuba, as part of its stockpiling plan for scarce materials. The mining of nickel is discussed in further detail in the review of the Nickel Range Region.

Copper, produced almost exclusively in the Nickel Range Region, was valued at \$70,981,618 in 1952. The 250,715,175 pounds produced was about one-half of all Canadian copper. Unlike nickel, copper has a fair-sized market at home. In 1952, domestic consumption was about one-third of copper production whereas only 1.6 per cent. of nickel was used in Canada. As copper is widely distributed, Ontario produces only about four per cent. of the world's total.

Iron ore was one of the first minerals mined in the Province but has been of little importance until recently. Deposits have been found in many places but are rarely of commercial importance. Total ore production in 1952 (2,717,490 tons) was slightly less than in 1951, despite the new iron mine of the Bethlehem Steel Corporation in Hastings. However, the 1952 aggregate was the second highest ever recorded, and will probably be dwarfed within a few years after various expansion programs are finished. The value of iron ore (\$19,632,551) caused it to rank fourth among metals, although it was only one-twentieth of all mineral value.

Ontario mines brought up 6,491,124 ounces of silver, largely from the Clay Belt district of Timiskaming, in 1952, an increase of 40 per cent. over the previous year. However, this does not approach the boom period totals of 1910-1920. British Columbia was the biggest Canadian producer and Ontario was the second with about one-quarter of the total. This country hardly ranks, however, with the two main producers—Mexico and the United States.

Cobalt, which is found not only with silver ore but more commonly with nickel-copper, is mined (in Canada) only in this Province; (most of the world's supply comes from central Africa). Production of 1,421,923 pounds in 1952 (worth \$3,226,903) was higher than at any time since 1913. In 1913, cobalt was simply a by-product of silver mining whereas it is now of increasing importance for heat-resistant alloys.

Zinc and lead deposits are found in several parts of Ontario and have been mined intermittently since 1866. In 1952, for the first time in several years, shipments of these metals were made in this Province, from a new mine in Timiskaming District.

### Non-Metallic Minerals

Asbestos is the name applied to several minerals, the commonest one in Canada being known to geologists as "chrysotile" and to chemists as hydrous magnesium silicate. The physical properties—fibre length, tensile strength, flexibility, colour, etc. may vary considerably from deposit to deposit as does the price. While the largest known deposits are in Quebec, the mineral is also found in various parts of Ontario. It was mined first in Cochrane District in 1917; other mines were opened but total production was only 233 tons up to 1949. In 1950, the Johns - Manville Company opened a mine at Matheson, District of Cochrane, which in 1952, produced about 2.5 per cent. of this country's asbestos. Canada mines about two-thirds of the world's asbestos, most of which (\$87.8 millions in 1952) is exported to the United States.

Quartzite rock is one of the forms of the chemical silica, the others being silica sand, sandstone, and pegmatitic quartz (i.e. a mixture of quartz and feldspar). Impure forms of sand and sandstone (the commonest forms) are classed as structural materials. Production of all forms of silica in Ontario was valued at \$1,752,640 in 1952— almost all in the Nickel Range and Quinte Regions. This was almost four-fifths of Canadian production, and was used mostly as a flux by the International Nickel Company's smelters (which use it at the rate of one ton of flux to five tons of concentrated ore). Canadian silica production is about 80 per cent. of consumption—there is some export and considerable import of silica sand from the United States. This material which is scarce in Ontario is used largely by the glass industry, followed by artificial abrasives, primary iron and cement.

Silica bricks, because they keep their strength at high temperatures, are used in blast furnaces. In 1952, 1,161,000 bricks (worth \$246,108) were made in Ontario, largely by the Algoma Steel Company at Sault Ste. Marie. About two-thirds of the country's silica bricks were made in Nova Scotia for the steel industry there. The total value of home output (\$586,400 in 1952) was dwarfed by imports from the United States (\$2,098,036).

Feldspar is the family name of a group of minerals used in the manufacture of glass, pottery and enamels. It has been mined in eastern Ontario for more than fifty years. Provincial production was 3,622 tons in 1952, worth \$37,628. The largest fraction was mined in Quebec, while exports--6,360 tons, nearly all to the United States--were about one-third of the Canadian output.

Nepheline syenite is a quartz-free rock chemically similar to feldspar but containing more aluminum. Like feldspar, it is used in ceramic industries, especially glass. There is only one mine in Canada producing this mineral. It is near Peterborough and began operations in 1935. In 1952, 82,681 tons worth \$1,111,950 were mined. Some two-thirds of this was shipped to the United States.

Ontario mined about three-quarters of the salt produced in Canada (757,025 tons in 1952 worth \$4,401,779 out of 992,007 tons). Approximately three-quarters of Ontario's production of this mineral comes from Essex County, the rest from Lambton and Huron Counties. Salt was discovered first at Goderich in 1863 by an oil driller. Known deposits are of enormous size, one bed in Lambton County being 500 feet thick. In 1951 (no later figures are available), 648,356 tons of salt--two-thirds of Canadian production--were used by chemical industries as a basic raw material. Salt is used in soda ash, chlorine, caustic soda, etc., which are used in other chemical processes connected with pulp and paper, synthetic textiles and other industries.

The only graphite mine in Canada, the Black Donald, is in Renfrew County. Present operations are on a salvage basis as the property will be flooded eventually by a Hydro development. In 1952, development of a new mine near Kingston was begun. Production in Ontario was 2,040 tons in 1952.

Three-quarters of the national gypsum output, used in the making of cement and wall plaster, is shipped to the United States. Ontario is the second largest producer of gypsum, its 278,992 tons in 1952 (worth \$1,060,429) being about eight per cent. of the Canadian total. (Nova Scotia is the largest producer.) Ontario has large deposits of the mineral (on the Moose River) which are too far from markets to be of commercial value.

### Structural Materials

Unlike most minerals, structural materials (sand, gravel, lime, cement, clay products, stone), are generally produced for local consumption. Production was valued at \$66,581,698 in 1952, or two-fifths of the value of all Canadian structural materials. This formed 14.6 per cent. of the value of all Ontario mining and about one-eighth of that of Canada. The higher Provincial proportion is simply a reflection of the large population and the high rate of building in Ontario. Details of Regional production illustrate this. About 25 per cent. of these materials is produced in the Metropolitan Region, 12 per cent. in the Upper Grand, 10 per cent. in the Niagara, 9 per cent in the Upper Thames, and 8 per cent. in the Burlington Region.

Quebec was the largest maker of cement in 1952 (7,272,241 barrels out of 18,520,538), while Ontario was second with 5,577,025 barrels, or one-third of the total, worth \$14,142,060. (2) Its plants are at St. Mary's, Belleville, and Port Colborne. Canadian consumption was 21,430,214 barrels in 1952.

Three Regions - the Upper Thames, Border, and Upper Grand, produced nearly all of the Province's 622,279 tons of quick and hydrated lime worth \$6,921,062 (volume and value were about one-half of Canada's totals). Most of this lime is used for industrial purposes, the pulp and paper industry being the largest user.

Ontario quarries cut 8,217,411 tons of stone valued at \$10,303,173 in (2) 1 barrel equals 350 lbs. cement.

1952. The bare totals give little insight into the industry, nor does the average price (about \$1.30 per ton), as dressed monument stones sell for about one hundred times this amount, and railway ballast for about one dollar per ton. Seven-eighths of the tonnage went into road construction, railway ballast, or concrete aggregate. Approximately 500,000 tons was used by Ontario iron and steel furnaces, while non-ferrous metal smelters, and paper mills used about 100,000 tons each. This was limestone which is about five-sixths of all the stone cut in Canada. Granite and sandstone are the next most popular stones. Two-thirds of Canada's marble is cut in the Province, but the amount is very small.

Ontario also mined a large volume of sand and gravel, 43,423,737 tons (worth \$23,240,203) or two-fifths of all Canadian production. This mineral with its purely local demand and supply (nearly all the Regions have gravel pits), is produced in greater quantities than any other mineral.

In 1952, most of the clay products came from the Metropolitan Region (two-thirds) or the Burlington Region. The most important product was brick (\$7,610,422), followed by drain and structural tile, flue lining, and sewer pipe. There are several small potteries in the Hamilton area with a total production of \$280,000 (1952). Ontario clay makes good bricks, but kaolin for chinaware must be imported. Total value of clay products was \$11,975,200 in 1952.

### Fuel

This Province suffers from a chronic shortage of mineral fuel (coal, oil and gas), which is only partly offset by firewood and hydro-electricity. Some relief may be expected as a result of the new oil pipeline and the projected gas pipeline from Alberta. In 1952, Canadian refineries received 58,894,631 barrels (a barrel is 35 Imperial, and 42 American gallons) of Canadian crude oil, but only 192,132 barrels or one-third of one per cent. came from the pioneer Ontario fields. Total crude received by the refineries was 141,361,953 barrels, nearly all of which was used in this country, exports being of little importance. Thus Canadian production is about 40 per cent. of home consumption. No exact figures are available for oil consumption in Ontario, but it may be estimated at about 30 per cent. of the country's total, or about 10 barrels per person a year (consumption in the United States is about 15 barrels per person). The oil fields of Ontario are historically important, but little more. They furnished only about three days' supply for the Province in 1952. Production varied slightly from refinery totals as 191,814 barrels valued at \$641,400 (wholesale) were pumped.

The first natural gas discoveries, apart from the gas found in oil wells, were made near Port Colborne in 1885, Leamington in 1889, and near Welland later in that year. The fields were great producers at first and, as a result, pipelines were laid to Buffalo in 1891, and Detroit in 1894, from the Welland and Essex fields respectively. Production in 1890 was estimated at 560,000,000 thousand cubic feet (abbreviated to M.C.F.). However, the fields were not as rich as they were first thought to be; exports to Detroit ceased in 1901 and to Buffalo in 1907. Ontario fields produced 8,302,190 M.C.F. of gas in 1952 worth \$9,946,024 at retail prices (Dominion Bureau of Statistics figures on the next page list wholesale values).

In 1952 about 40 per cent. of all natural gas used in Ontario came from the United States (5,981,635 M.C.F. worth \$1,900,577 wholesale). Small volumes of propane gas are also consumed in the Province. Many areas, such as Toronto, must rely on manufactured gas. In 1951 (latest available figures), 13,447,033 M.C.F. of artificial gas were sold in the Province. Volumes are not strictly comparable since natural gas has about 1,030 British Thermal Units per cubic foot, and artificial gas only about 537. (3) There were 3,481 active gas wells in 1951. A total of 287 wells were drilled in 1952, of which 165 were producers and 122 were dry. About two-thirds of the wells were in the Niagara, Burlington and Lake Erie Regions.

Ontario is even more deficient in solid than in liquid fuels, as there is no bituminous or anthracite coal, just peat and lignite. The Provincial Government investigated these substances during the fuel shortages of 1918 and 1946, with indifferent results. Peat may contain as much as 90 per cent. water, and lignite

(3) A British Thermal Unit is the amount of heat needed to raise one pound of water one degree Fahrenheit.

About one-half of Canadian coal (21,466,620 tons), and most of the imports into the country, were consumed in Ontario. This total consumption which has increased slightly over the years, conceals a per capita decline in the use of coal caused mostly by increasing utilization of oil.

### APPARENT CONSUMPTION OF COAL (1951)

 Canadian Production
 17,571,154 tons

 Imports
 26,523,921 "

 44,095,075 "

 Less Exports
 435,083 "

Apparent Consumption 43,659,992 tons

### PRODUCTION OF SELECTED MINERALS (1952)

	Coal			Natural Gas		troleum	Total
	tons	\$1000	M.C.F.	\$1000	bbl.	\$ 1000	\$1000
N.S.	5,850	50,432	-		en e	-	50,432
N.B.	720	5,616	200	149	14	20	5,785
Ont.	-	***	7,916	3,166	192	660	3,826
Man.	-	-	-	-	80	196	196
Sask.	2,020	3,895	950	95	1,600	2,080	6,070
Alta.	7,150	39,733	78,500	5,888	58,677	139,886	185,506
B . C .	1,612	9,612	on.	-	-	-	9,612
Yukon	8	132	25	8	301	530	670
		The state of the s					
Canada	17,360	109,420	87,591	9,306	60,864	143,372	262,098

Source: Preliminary Report on Mineral Production, 1952, Dominion Bureau of Statistics.

Note: due to rounding, figures may not add to totals.

# GROSS VALUE OF MINERAL PRODUCTION BY ECONOMIC REGIONS, 1949-1952

	1952 \$'000	1951 \$'000	1950 \$1000	1949 \$'000
Region 1 - Metropolitan	14,520	12,088	9,796	7,178
Region 2 - Burlington	4,986	4,142	3,716	3,741
Region 3 - Niagara	6,139	5,736	4,462	4,305
Region 4 - Lake Erie	5,294	4,555	4,174	3,926
Region 5 - Upper Thames	5,285	4,829	4,015	3,489
Region 6 - Border	8,465	8,925	8,243	8,729
Region 7 - St. Clair River	4,943	5,112	4,935	3,482
Region 8 - Upper Grand River	7,253	6,094	5,361	4,370
Region 9 - Blue Water	2,690	2,014	1,865	1,601
Region 10 - Kawartha	2,933	2,718	1,893	1,612
Region ll - Quinte	8,664	8,122	7,124	6,049
Region 12 - Upper St. Lawrence	1,209	793	617	147
Region 13 - Ottawa Valley	7,267	5,851	3,654	2,395
Region 14 - Highlands	412	487	313	153
Region 15 - Clay Belt	79,440	79,150	78,493	69,560
Region 16 - Nickel Range	250,296	251,503	190,491	168,805
Region 17 - Sault	8,457	9,504	7,176	4,746
Region 18 - Lakehead	16,015	18,023	16,729	14,360
Region 19 - James Bay	11,305	12,910	12,824	10,156
Structural Materials (1)	10,041	9,619	6,909	5,722
TOTAL	453,412(	2)452,174	372,788	324,526

- (1) Includes limestone and sand and gravel produced or purchased by Counties,
  Townships and the Department of Highways also a small amount of Railway
  Ballast produced by Railways. This information is not available by Counties
  or Regions.
- (2) Regional values of structural materials add to approximately two million dollars more than shown in the total value. This amount was reported both by the producers and purchasers in the statements returned to the Ontario Department of Mines, thus resulting in this duplication throughout the regional totals.

Note: Figures may not add to totals due to rounding.

VALUE OF MINERAL PRODUCTION BY ECONOMIC REGIONS - 1952

% Change 1951-1952	20.1 20.4 7.0 16.2 10.7 (1)	33.60	6.7 24.5 1.5.4 1.5.4 0.4	-11.0	14.4
Total Total	84440 84440	04400	0.00	20.11.00 20.12.01	2.2
Value 8,000	14,520 4,986 6,139 5,294 5,285	8,465 4,943 7,253 2,690 2,933	8,664 1,209 7,267 1,267 7,412	250,296 8,457 16,015 11,305	10,041
ducts % of Total	65.8 14.7 0.9 1.1	00400 00000	0 WO 1	m 0,	100.0
Clay Products % Value \$ 100	7,883 1,721 112 -	823 104 299 110	412 415	104	11,975
Materials % of Total	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	400000 40000	11 803.00 10 10 10 10 10 10 10 10 10 10 10 10 1	H H Q	18.2
Structural Materials % of Value Total	6,636 3,215 5,154 1,590 4,622	2,451 110 6,954 1,549 1,744	8,139 1,198 1,763 217 637	1,135	10,041 55,127 (4)
Jilic For Total	0.001	20.09	16.5	0.00.0	100.0
Non Metallic	50 873 3,704 496 (1)	5,191 4,729 (2) 1,031 1,112	456 11 277 121 3,934	1,4 0,44 0,44 0,44	23,695
Total Total	4 r t s 1	1 1 1 1	20.6	68 80 4 4 60 80 4 4 60 80 7 6 7 60 80 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	100.0
Wetallic Value \$1000	1 1 1 1 1	4 1 1 4 1	23	247,743 8,105 15,759 11,305	362,615
	Region 1 Region 2 Region 3 Region 4 Region 5	Region 6 Region 7 Region 8 Region 9 Region 10	Region 11 Region 12 Region 13 Region 14 Region 15	Region 16 Region 17 Region 18 Region 19	Structural Materials(3) TOTAL

(1) Middlesex County production of petroleum included under Lambton County in 1952 but not in 1951 (2) Value less than \$1,000 (3)Includes limestone and sand and gravel produced or purchased by Counties, Townships and the Department of Highways also a small amount of Railway Ballast produced by Railways. This information is not available by Counties or Regions.

(4) Regional values of structural materials add to approximately two million dollars more than shown in the total value. This amount was reported both by the producers and purchasers in the statements returned to the Ontario Department of Mines, thus resulting in this duplication throughout the regional totals.

Note: Figures may not add to totals due to rounding.

MINERAL PRODUCTION - ONTARIO - 1952

		Ç			9,323 7,478			
					10,484			
1952	0001\$	362,615	23,695	55,127	11,975		453,412	
•	41				4,688	·		
Saploy	No.	36,092	2,667	3,879	71 1,701		44,339	
ÞΗ	No	89	352	330	77		(1)	
	Classification of Minerals	Metallic	Non Metallic	Structural Materials	Clay Products	,	Total	

Where a firm produces several unrelated minerals such as gold and sand, in the same county, it is included with the number of (1) Where a firm operates in more than one county it is included with the number of employers for each county for the mineral it employers for each mineral. A total is not shown.

This amount was reported both by the producers and purchasers in the statements returned to the Ontario Department of Mines, thus resulting in this duplication throughout the regional totals. Regional values of structural materials add to approximately two million dollars more than shown in the total value. (5)

Note: Figures may not add to totals due to rounding.

### MINERAL PRODUCTION - ONTARIO - 1952

### REGION 1 - METROPOLITAN

Mineral	Employ -ers -ees No. No.	Payroll \$'000	Volume Shipped Or Used	19-2 \$1000	lue 1951-1952 % Change
Structural Materials Hydrated Lime ) Quicklime ) Limestone Sandstone Sand and Gravel Sand-lime Blocks ) Sand-lime Bricks )	48 583 1 16 2 54 13 37 29 329 3 147	1,603 31 122 65 925 460	7,968 tons 442,244 tons 15,227 tons 5,695,799 tons 490,081 units 24,436,729 units	6,636 143 579 128 4,987 114 685	25.9 (1B) 0.6 27.1 -29.6 35.9 3.5 -3.1
Clay Products Brick Drain Tile Haydite Pottery Sewer Pipe Flue Lining Structural Tile (3A)	16 905 16 905	3,021	188,606,748 units 152,400 units 14,859 cu.yds. (2) 1,695,536 sq.ft.) 211,041 sq.ft.) 21,865 tons 295,042 sq.ft.	7,883 6,231 9 88 1 1,015 440 98	15.6 18.6 509.6 -19.5 (1A) 20.1 -15.0 8.1
Total	64 1,488	4,623		14,520	20.1
HALTON					
Structural Materials Hydrated Lime ) Quicklime ) Limestone Sandstone Sand and Gravel	7 95 1 16 1 45 3 6 2 28	232 31 116 12 74	7,968 tons 438,544 tons 1,791 tons 330,637 tons	1,274 143 573 15 542	6.5 (1B) 0.6 25.8 -79.6 4.2
Clay Products Brick	2 <u>117</u> 2 <u>117</u>	<u>329</u> 329	27,192,479 units	1,329 1,329	0.8
Total	9 212	561		2,603	3.5
PEEL				(()	21.6
Structural Materials Limestone Sandstone Sand and Gravel	18 95 1 9 10 31 7 55	220 6 54 160	3,700 tons 13,436 tons 708,463 tons	664 6 113 545	(1A) 5.8 24.1
Clay Products Brick Haydite Structural Tile (3A) Structural Tile (3B)	<u>4</u> <u>390</u> ) ) 4 390 }	1,384 1,384	106,157,563 units 14,859 cu.yds. 19,285 tons 205,042 sq.ft.	3,014 2,431 88 404 90	12.0 20.5 -19.5 -15.4 4.4
Total	<del></del> 22 485	1,604		3,678	
					***************************************

YORK

Mineral	Empl -ers -	-		Value 1952 1951-1955 \$1000 % Change
Structural Materials Sand-lime Blocks ) Sand-lime Bricks ) Sand and Gravel	3 1	93 <u>1,151</u> 47 460 46 691	490,081 units 24,436,729 units	4,698 114 3.5 685 3,899 43.9
Clay Products  Brick Drain Tile Pottery Sewer Pipe Flue Lining		98 1,308 98 1,308	55,256,706 units 152,400 units (2) 1,695,536 ft.) 211,041 ft.)	3,541 26.1 2,471 29.0 9 509.6 1 (1A) 1,015 20.1
Structural Tile (3A)) Structural Tile (3B))			2,580 tons 90,000 sq.ft.	37 -9.9 8 78.7
Total	33 79	91 2,459	=	8,239 30.1
		REGION 2	- BURLINGTON	
Non Metallic Natural Gas Peat (Humus) Petroleum	1	95 228 90 219 5 9		.(6) 50 (6) 8.4 -0.9 . 24 21.1 (4) -65.8
Structural Materials Limestone Sand and Gravel	15 28 3 11 12 17	39 937 17 436 72 501	1,387,507 tons 1,870,502 tons	3,215 1,515 1,700 28.5
Clay Products Blue Clay ) Brick ) Drain Tile )	8 23	<u>667</u>	49 tons 11,336,778 units 1,226,084 units	1,721 15.8 (4) 18.2 566 4.5 89 55.0
Pottery ) Sewer Pipe ) Flue Lining ) Structural Tile (3A)	8 2	34 667	(2) 223,315 ft.) 393,084 ft.) 26,405 tons	277 146.0 306 9.9 482 -2.7
Total	30 6:	18 1,833		4,986 20.4
	== =			Annual formation and the second secon
BRANT				
Non Metallic Natural Gas Petroleum	3	136 136 (5)	21,519,000 cu.ft. 16 bbls.	26 ,-1.3 26 ,-0.9 (4) -65.8
Structural Materials Sand and Gravel	$\frac{7}{7}$ $\frac{12}{12}$	28 28 374	1,640,401 tons	1,381 51.6 1,381 51.6
Total	11 17	76 510		1,407 50.2
	===	= ====		

### WENTWORTH

	Empl	Loy		Volume Shipped		lue
Mineral	-ers -		Payroll \$'000	Or Used	\$'000	1951-1952 % Change
		140 .	φουσ		Ť	
Non Metallic	3 2	47	92 84	(7)	. (7)	$\frac{21.1}{(7)}$
Natural Gas Peat (Humus)	1	5	9	1,305,670 lbs.	24	21.1
	0		560		1,834	7.9
Structural Materials Limestone	8 3	$\frac{161}{117}$	<u>563</u> 436	1,387,507 tons	1,515	17.7
Sand and Gravel	5	44	127	230,101 tons	319	-22.7
Clay Products	8	234	667		1,721	15.8
Blue Clay	) —	234	001	49 tons	(4)	18.2
Brick	)			11,336,778 units	566 89	4.5 55.0
Drain Tile Pottery	) 8	234	667	1,226,084 units (2)	277	146.0
Sewer Pipe	)			223,315 ft.)	306	9.9
Flue Lining	)			393,084 ft.) 26,405 tons	482	-2.7
Structural Tile (3A	) )			20,40) 00113		
m . t . 7		442	1 202		3,579	11.6
Total	19	442	1,323			
	==					
		Ī	REGION 3	- NIAGARA		
Metallic	1 1	,726	6,336	(-)	(0)	(0)
Nickel	(8)1 1	,726	6,336	(9)	(9)	(9)
Non Metallic	<u>95</u> 95	117	292	()	873	(10) <u>25.1</u>
Natural Gas	95	117	292	728,528,000 cu.ft.(10)	) 873	(10) 25.1
Structural Materials	20	405	1,292		5,154 3,016	4.1
Cement	1	183	630	1,099,125 bbls.	3,016	6.3 2.6
Limestone	9	184	529 133	1,131,137 tons 551,489 tons	462	-3.9
Sand and Gravel	10	50	200	//2, 10/ 1111		
Clay Products	_1	18	53	1 005 000 units	112	27.8 28.6
Brick ) Drain Tile )	1	18	53	1,225,000 units 854,000 units	48	26.7
Digin ille /						
Total	117 2	2,266	7,974		6,139	7.0
100%1						-
LINCOLN						
PIMCOTA						
Non Metallic	<u>5</u>	43	112 112	(7)	(7)	(7)
Naturak Gas	7	43	112	(1)	(1)	(1)
Structural Materials	2	95	292	261, 250	777	-5.8
Limestone Sand and Gravel	2	95	292	364,358 tons	777	-5.7 (1B)
	49	-	-	-		
Clay Products	1	18	53	3 005 000	112	27.8
Brick ) Drain Tile )	1	18	53	1,225,000 units 854,000 units	65 48	28.6 26.7
2/10/211/12/10 /				0),,000 411200		
	8	166	1,57		889	-2.6
	Ö	156	457		7009	-2.0
	==					

WELLAND						
Mineral	Emmy -ers	ploy -ees No.	Payroll \$'000	Volume Shipp Or Used	1952	lue 1951-1952 % Change
Metallic Nickel	(8) 1	1,726 1,726	6,336 6,336	(9)	(9)	(9)
Non Metallic Natural Gas	<u>90</u> 90	$\frac{74}{74}$	180 180	728,528,000 cu		25.1 25.1
Structural Materials Cement Limestone Sand and Gravel	18 1 7 10	310 183 89 .38	1,000 630 237 133	1,099,125 bb 766,779 to 551,489 to	ns 899	6.1 6.3 11.1 -3.7
Total	109	2,110	7,517		5,249	8.8
		REG	ION 4 -	LAKE ERIE		
Non Metallic Gypsum Natural Gas	7 <u>9</u> 2 77	397 211 186	1,131 692 439	278,992 to 2,207,065,000 cu	ons 3,704 1,060 1.ft.(11)2,644	15.5 57.7 (11) 4.3 (11)
Structural Materials Limestone Sand and Gravel	5 <u>9</u> 4 5	14 <u>3</u> 107 36	445 315 130	1,312,799 to 484,755 to	1,590 1,193 ons 396	18.0 5.0 88.3
Total	88 =	540	1,575		5,294	16.2
HALDIMAND						
Non Metallic Gypsum Natural Gas	67 2 65	340 211 129	990 692 298	278,992 t 1,654,783,000 c	3,043 ons 1,060 cu.ft(11)1,982	5(.1
Structural Material Limestone Sand and Gravel	s <u>5</u> 4	107 107 (5)	315 315 (5)	1,312,799 t 502 t		4.9 5.0 -55.8
Total	./5		1,305		4,236	9.6
NORFOLK						
Non Metallic Natural Gas	12 12	<u>57</u> 57	141 141	552,282,000	662 a. ft. 662	38.0
Structural Material Sand and Gravel	.s <u>4</u>		130 130	484,253 t	396 cons 396	88.5
Total	16				1,058	

### REGION 5 - UPPER THAMES

Mineral	Emp -ers No.	loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Value 1952 195 \$'000 %	1-1952
Non Metallic Natural Gas Petroleum	25 11 14	165 141 24	390 337 53	374,890,000 cu.ft. 13,966 bbls.(12	496 149 2) 47(12)	51.4(12) 46.1 132.3(12)
Structural Materials Hydrated Lime ) Quicklime ) Limestone Sand and Gravel	32 3 3 26	367 127 128 112	1,162 462 387 313	15,441 tons 290,063 tons 525,624 tons 1,244,299 tons	4,622 253 2,698 867 804	7.3 23.7 -7.2 38.6 40.3
Clay Products Drain Tile	<u>5</u>	44	66 66	2,860,733 units	167 167	19.9 19.9
Total	62	576	1,617		5,285	10.7(12)
ELGIN						
Non Metallic Natural Gas Petroleum	13 5 8	93 88 5	226 221 5	318,675,000 cu.ft.(3	13) <del>382</del> (13) 47	59.7 53.8(13) 132.3
Structural Materials Sand and Gravel	14	2(5	5 5	93,040 tons	<u>58</u> 58	-3·5 -3·5
Clay Products Drain Tile	1	3(1	4) 2	165,000 units	8 8	<u>25.4</u> 25.4
Total	18	98	233		494	47.6
10007	==				Committee of the Commit	
MIDDLESEX						
Non Metallic Natural Gas Petroleum	8 2 6	32 13 19	69 22 47	(13) (12)	(13) (12)	(13) (12)
Structural Materials Sand and Gravel	12 12	94 94	282 282	982,367 tons	<u>640</u>	146.4
Clay Products Drain Tile	2	6	2 2	258,000 units	15 15	126.2
Total	22	132	353		655	145.9(12)
IOCAL	-					
OXFORD						
Non Metallic Natural Gas	<u></u>	<u>40</u>	94 94	56,215,000 cu.ft.	67 67	13.9 13.9
Structural Materials Hydrated Lime ) Quicklime ) Limestone Sand and Gravel	16 3 3 10	271 127 128 16	874 462 387 26	15,441 tons 290,063 tons 525,624 tons 168,892 tons	3,923 253 2,698 867 105	-1.6 23.7 -7.2 38.6 -58.4

OXFORD	_	(continued)

Mineral	Emp -ers	loy -ees No.	Payroll \$'000	Volume Shipped Or Used		ue 1951-1952 % Change
Clay Products Drain Tile	2 2	35 35	62 62	2,437,733 units	145 145	14.1 14.1
Total	22	346	1,030		4,135	-0.9
			REGION	6 - BORDER		
Non Metallic Natural Gas Petroleum Salt ) Salt (15) )	40 21 17 2	703 516 30 157	2,387 1,755 2 91 540	,267,305,000 cu.ft 14,924 bbls. 167,280 tons 373,320 tons	5,191 2,716 50 2,043 382	-11.0 -22.7 -13.3 9.0 -1.1
Structural Materials Limestone Quicklime Sand and Gravel	18 3 2 13	181 81 58 42	495 270 135 90	297,740 tons 185,168 tons 315,929 tons	2,451 280 1,881 290	7.3 26.1 1.9 34.8
Clay Products Brick Drain Tile Flue Lining Structural Tile (3A	) 10 ) 10 ) 10	163 163	<u>341</u> 341	4,169,279 units 12,125,244 units 300 ft. 2,542 tons	823 191 592 1 39	1.8 -26.4 11.0 (1A) 163.8 (1B)
Total		L,047	3,222		8,465	-5.2
ESSEX						
Non Metallic Natural Gas Salt ) Salt (15) )	9 7 2	393 236 157	1,250 710 1 540	,640,464,000 cu.ft. 167,280 tons 373,320 tons	4,390 1,965 2,043 382	-4.6 -16.1 9.0 -1.1
Structural Materials Limestone Quicklime Sand and Gravel	7 3 1 3	138 81 34 23	442 270 120 53	297,740 tons 178,189 tons 174,136 tons	2,243 280 1,827 137	2.8 26.1 -1.1 19.6
Clay Products Brick Drain Tile Flue Lining Structural Tile (38	) † ) † ) <del> </del>	<u>39</u> 39	<u>71</u> 71	240,595 units 3,360,798 units 300 ft. 376 tons	190 10 174 1	7.8 -51.1 12.1 (1A) 517.7
Total	20	570	1,764		6,824	-2,0
KENT						
Non Metallic Natural Gas Petroleum	31 14 17	310 280 30	1,136 1,045 91	626,841,000 cu.ft.	801 751 50	-35.9

### KENT (continued)

Mineral	Emp -ers No.	loy -ees No.	Payroll \$'000	Volume Shipped Or Used		e 1951-1952 & Change
Structural Materials Quicklime Sand and Gravel	11 1 10	43 24 19	<u>53</u> 15 37	6,979 tons 141,793 tons	207 55 153	106.8 (1A) 52.1
Clay Products Brick ) Drain Tile ) Structural Tile(3A)) Structural Tile(3C)	6	124	<u>269</u> 269	3,928,684 units 8,764,446 units 2,166 tons	633 181 418 34	0.1 -24.4 10.6 142.7 (1B)
Total	48	477	1,458		1,641	-16.4
	-		-			
		REGIO	ON 7 - ST	· CLAIR RIVER		
LAMBTON						
Non Metallic Natural Gas Petroleum Salt Salt (15))	69 4 62 3	282 135 84 63	1,000 614 153 233	,702,883,000 cu.ft. 162,908 bbls.( 66,921 tons 79,266 tons		-5.5(12) 12.4 2) -9.3(12) -3.7 -76.8
Structural Materials Sand and Gravel	6	10	2 <u>3</u> 2 <u>3</u>	191,164 tons	110 110	45.2
Clay Products Drain Tile ) Structural Tile(3A))	14	<u>27</u> 27	<u>40</u> 40	1,943,543 units 103 tons	104 103 2	24.8 38.2 -80.7
Total	79 —	319	1,063		4,943	-4.3(12)
	REGI	ON 8 -	UPPER GF	RAND RIVER		
Non Metallic Peat (Fuel)	. 1	<u>2</u> 2(1	(4)	32 lbs.	(4)	6.7
Structural Materials Cement Hydrated Lime) Quicklime Limestone Sand and Gravel	28 1 3 1 23	481 184 165 11 121	1,463 609 495 43 315	1,575,433 bbls. 71,375 tons 18,271 tons 48,092 tons 2,138,668 tons	6,954 3,883 1,328 258 16 1,469	19.0 10.0 9.1 -5.7 -17.9 83.1
Clay Products Brick ) Drain Tile)	5 5	<u>65</u> 65	118 118	1,000,000 units 3,771,975 units	299 60 239	18.7 -20.0 35.2
Total ·	34	548	1,581		7,253	19.0
PERTH Non Metallic Peat (Fuel)	1	2 2(1	<u>(4)</u> (4)	32 lbs.	<u>(4)</u>	6.7

### PERTH (continued)

Mineral	Empl	.oy -ees	Payroll	Volume Shipped Or Used	Val	ue 1951 <b>-</b> 1952
MINETAL	No.	No.	\$:000	OI OBCU		% Change
Structural Materials Cement Sand and Gravel	<del>7</del> 1 6	220 184 36	703 609 94	1,575,133 bbls. 841,746 tons	4,347 3,883 464	21.4 10.0 778.0
Clay Products Drain Tile	1 1	<u>3</u>	2 2	150,000 units	<u>8</u> ———	-16.7 -16.7
Total	9	225	705		4,355	21.3
	=					
WATERLOO		34	90		1.50	20.2
Structural Materials	7	Antonio	88		450	30.3
Sand and Gravel	7	34	88	583,449 tons	450	30.3
Clay Products	<u>3</u>	34	<u>57</u>		162	11.8
Brick )	3	34	57	1,000,000 units	60 102	-20.0 45.6
Drain Tile )				1,429,775 units	102	
Total	10	68	145		612	24.8
WELLINGTON					0.750	30.7
Structural Materials Hydrated Lime )	14	227 165	<u>672</u> 495	71,375 tons	2,158	12.7 9.1
Quicklime ) Limestone	3	10)	497	18,271 tons 48,092 tons	258 16	-5.7 -17.9
Sand and Gravel	10	51	133	713,473 tons	556	37.4
Clay Products Drain Tile	<u>1</u>	28 28	<u>59</u> 59	2,192,200 units	129 129	32.4
Total	15	255	731		2,287	13.6
10001	=		===			
		REGIO	ON 9 - BLI	JE WATER		
Non Metallic	2 2	77 77	232 232	70,238 tons	1,031 1,031	2.5
Salt Structural Materials	34 2	196 46	574 140	499,299 tons	1,549	$\frac{72.3}{14.7}$
Limestone Quicklime	-	-	_	-	(1B)	(1B)
Sand and Gravel	32	150	434	1,838,486 tons	1,045	128.6
Clay Products	7	1+1+	46	705,000 units	110 30	<u>0.7</u> -9.6
Brick ) Drain Tile)	7	1+1+	46	1,231,000 units	80	5.2
					D (22	
Total	43	317	852		2,690	33.6

#### BRUCE

	Empl			Volume Shipped	Val	
Mineral	-ers	-ees No.	Payroll \$'000	Or Used		1951-1952 % Change
Structural Materials Limestone Sand and Gravel	14 1 3	$(\frac{14}{5})$	33 - 33	75 tons 207,695 tons	123 3 121	57.7 -79.6 83.2
Clay Products Brick ) Drain Tile )	<u>3</u> 3	20	<u>22</u> 22	165,000 units 748,000 units	55 7 49	9.0 18.2 7.8
Total	7 =	34	. 55		179	38.5
DUFFERIN						
Structural Materials Sand and Gravel	1	<u>5</u>	13 13	119,822 tons	<u>58</u> 58	10.8
Total	- 1 -	- 5 =	13		58 =	10.8
GREY						
Structural Materials Quicklime Sand and Gravel	<u>7</u> 7	<u>48</u> 48	136 136	379,745 tons	254 (1B) 254	337.6 (1B) 356.7
Clay Products Brick ) Drain Tile )	<u>2</u> 2	16 16	17	540,000 units 150,000 units	32 23 9	-11.6 -15.4 0.0
Total	9 =	64	153		286	203.6
HURON						
Non Metallic Salt	2/2	77 77	2 <u>32</u> 2 <u>32</u>	70,238 tons	1,031 1,031	2.5
Structural Materials Sand and Gravel	13 13	45 45	117 117	627,505 tons	260 260	13.6 13.6
Clay Products Drain Tile	2/2	8	$\frac{7}{7}$	333,000 units	2 <u>3</u> 2 <u>3</u>	1.9
Total	17	130	356		1,313	4.5
SIMCOE						
Structural Materials Limestone Sand and Gravel	9 1 8	84 46 38	275 140 135	499,224 tons 503,719 tons	854 501 353	77.3 17.4 545.9
Total.	9	84	275		854	77.3

## REGION 10 - KAWARTHA

Mineral	Emp -ers No.	loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Val 1952 \$'000	ue 1951-1952 % Change
Non Metallic Nepheline Syenite	1	110 110	<u>337</u> 337	82,681 tons	1,112 1,112	<u>-0.3</u> -0.3
Structural Materials Granite and Trap Limestone Sand and Gravel	15 1 1 13	228 102 50 76	556 266 93 197	322,871 tons 303,785 tons 1,438,630 tons	1,744 704 328 713	15.0 24.3 21.9 4.4
Clay Products Brick ) Drain Tile) Pottery )	<u>5</u> 5	<u>45</u> 45	<u>41</u> 41	834,470 units 616,811 units (2)	77 40 34 2	-10.1 -23.7 12.8 0.7
Total	21	383	934		2,933	7.9
DURHAM - No Producti	on in	1952				
ONTARIO						
Structural Materials Sand and Gravel	$\frac{7}{7}$	26 26	<u>52</u> 52	450,908 tons	28 <u>3</u> 28 <u>3</u>	33·7 33·7
Clay Products Brick ) Drain Tile )	<u>1</u> 1	10 10	17 17	20,000 units 600,000 units	34 1 33	25.9 (1A) 22.2
Total	8 =	36 =	69 =		317	32.8
PETERBOROUGH						
Non Metallic Nepheline Syenite	1	110 110	<u>337</u> 337	82,681 tons	1,112 1,112	<u>-0.3</u> -0.3
Structural Materials Granițe and Trap Sand and Gravel	; <u>4</u> 1 3	146 102 44	397 266 131	322,871 tons 930,181 tons	1,100 704 397	26.3 24.3 30.0
Clay Products Brick	$\frac{1}{1}$	<u>29</u> 29	<u>22</u> 22	696,470 units	<u>34</u> 34	<u>-22.7</u> <u>-22.7</u>
Total	6 =	285	756		2,246	10.7
VICTORIA						
Structural Material Limestone	s <u>1</u>	50 50	93 93	303,785 tons	328 328	

## VICTORIA (continued)

Mineral	Emp	loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Val 1952 \$'000	1951-1952 % Change
Clay Products Brick ) Drain Tile )	2	<u>6</u> 6(:	<u>2</u> 14) 2	118,000 units 16,811 units	<u>7</u> 5	-46.5 -40.2 -63.2
Total	3 =	56 ==	95 —		335	18.9
NORTHUMBERLAND						
Structural Materials Sand and Gravel	<u>3</u>	6	14 14	57,541 tons	<u>33</u> 33	4.8
Clay Products Pottery	$\frac{1}{1}$	(5) (5)	-	(2)	2/2	0.7
Total	4	6	14		35	4.5
		REGT	ON 11 - 6	UTNTE		
Metallic Iron Ore Cobalt) Silver)	3/2 1(8	564 133 3)431	1,610 380 1,230	3,602 tons (16)	23 23 (16)	102.9 102.9 (16)
Non Metallic Feldspar Fluorspar Mica, amber Quartz (Silica) Talc	7 1 3 1	93 19 28 (5) 25 21	151 7 44 - 50 50	894 tons 804 tons 28,934 lbs. 58,000 tons 12,454 tons	456 6 38 1 260 150	-34.8 -89.0 -82.8 834.1 0.8 -6.7
Structural Materials Cement Granite and Trap Limestone (17) Marble Sand and Gravel	18 1 2 6 4 5	362 243 19 25 35 40	1,126 879 32 52 65 98	2,902,467 bbls. 27,366 tons 245,836 tons 30,009 tons 326,613 tons	8,139 7,243 90 348 195 263	10.2 18.2 -56.8 -30.0 8.0 -28.4
Clay Products Brick ) Drain Tile )	<u>1</u> 1	<u>9</u> 9	18 18	450,000 units 470,000 units	46 18 28	55.1 20.0 90.8
Total		1,028	2,906		8,664	6.7
FRONTENAC						
Non Metallic Feldspar Mica,amber Quartz (Silica)	5 1 3 1	44 19 (5) 25	57 7 50	894 tons 28,934 lbs. 58,000 tons	267 6 1 260	-15.0 -89.0 834.1 0.8

# FRONTENAC (continued)

Mineral Structural Materials Granite and Trap Limestone (17) Sand and Gravel Total	Employ -ers -ees No. No. 7 337 4 22 2 4	Payroll \$1000 777 20 48 9 — 134	Volume Shipped Or Used  1,500 tons 218,322 tons 69,819 tons	Value  1952 1951-1952  \$'000 % Change  398 44.3 26 -15.1  316 61.5 57 12.8  666 12.7
HASTINGS				
Metallic Iron Ore Cobalt ) Silver )	3 564 2 133 (8)1 431	1,610 380 1,230	3,602 tons (16)	$\begin{array}{ccc} \frac{23}{23} & \frac{102.9}{102.9} \\  & (16) & (16) \end{array}$
Non Metallic Fluorspar Talc	2 49 1 28 1 21	94 44 50	804 tons 12,454 tons	188 -51.0 -82.8 -150 -6.7
Structural Materials Cement Granite and Trap Limestone Marble Sand and Gravel	7 313 1 243 1 12 1 (18) 3 29 1 29	1,023 879 12 (18) 57 75	2,902,467 bbls. 25,866 tons 19,514 tons 28,396 tons 248,565 tons	7,703 13.3 7,243 18.2 65 -63.8 20 106.4 182 8.5 194 -38.7
Total	12 926	2,727		7,914 10.0
LENNOX AND ADDINGTON				
Structural Materials Limestone Marble Sand and Gravel	$\frac{3}{1}$ $\frac{9}{3}$ $1$ $6$ $1$ $(5)$	13 4 8	8,000 tons 1,613 tons 1,229 tons	28 18.9 33.3 14 2.1 2 157.0
Clay Products Brick Drain Tile	1 9 1 9	<u>18</u> 18	450,000 units 470,000 units	. 46 18 20.0 28 90.8
Total	4 18	31		74 39.3
PRINCE EDWARD				
Structural Materials Limestone Sand and Gravel	' 1 7 1 7 	13 13	7,000 tons	11 -96.3 (1B) 11 (1A)
Total	1 7 = =	13		11 -96.3

#### REGION - 12 - UPPER ST. LAWRENCE

Mineral	Emp -ers	loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Val 1952 \$'000	ue 1951-1952 % Change
Non Metallic Mica, amber Quartz (Crystals)	2 1 1	( <del>5</del> ) (2)	<del>-</del> (2)	22,500 lbs. 1,544 lbs.	( <del>11</del> )	716.6 (1A) 702.2
Structural Materials Limestone Marble Quicklime Sand and Gravel	20 2 1 1 16	128 19 4 2(1	285 42 6 4) 1 236	110,087 tons 629 tons 148 tons 1,070,608 tons	1,198 185 16 4 993	51.3 108.3 -2.1 5.2 45.4
Total	22	128	285		1,209	52.5
	-	2000	and an income			
DUNDAS						
Structural Materials Sand and Gravel	$\frac{1}{1}$	(5)	-	6,241 tons	1	(1A) (1A)
Total	1				1	(1A)
	tido				=	-
GLENGARRY						
Structural Materials Sand and Gravel	$\frac{1}{1}$	<u>25</u> 25	<u>69</u> 69	175,500 tons	228 228	71.6 71.6
Total	1	25	69		228	71.6
	=	- Section -	Annual Prints		Processing and a separate of the second and a second and	Management over 1999
GRENVILLE						
Structural Materials Sand and Gravel	<u>5</u>	40 40	110 110	612,022 tons	495 495	68.3 68.3
	_					
Total	5	40	110		495	68.3
	==	_				
LEEDS						
Non Metallic Mica, amber Quartz (Crystals)	2 1 1	5) 2)	- (2)	22,500 lbs. 1,544 lbs.	$(\frac{11}{4})$	$\frac{716.6}{(1A)}$
Structural Materials Limestone Quicklime Sand and Gravel	7 1 1 5	36 13 2(1 21	5 <u>9</u> 32 4) 1 27	56,000 tons 148 tons 109,479 tons	166 113 4 49	69.3 292.3 5.2 -24.6
Total	9	36	59		178	78.4
	=		Malatina Princip material gline dep			* 10 A 10 MINUTES (* 12 MINUTES AND THE SECOND SECO

#### STORMONT

Mineral	Emp -ers	loy -ees No.	Payroll	Volume Shipped Or Used	Val 1952 \$'000	ue 1951-1952 % Change
Structural Materials Limestone Marble Sand and Gravel	6 1 1 4	27 6 4 17	147 11 6 31	54,087 tons 629 tons 167,366 tons	308 72 16 220	15.5 20.2 -2.1 15.5
Total	6	27	47		. 308	15.5
	1994					ale agencia del del como del c
		REGIO	ON - 13 -	OTTAWA VALLEY		
Metallic Calcium ) Magnesium)	1	431 431	1,256 1,256	(19)	4,812 4;812	<u>33.0</u> <u>33.0</u>
Non Metallic Feldspar Graphite Mica, amber Mineral Waters Phosphate	12 1 1 8 2	58 (2) 58 (5) (5)	169 (^) 169 - -	1,361 tons 2,040 tons 277,766 lbs. 2,370 gals.	277 18 256 3 (4)	-3.9 -66.4 10.6 -15.6 -2.2 (1B)
Structural Materials Limestone Quicklime Sandstone Sand and Gravel	31 10 3 2 16	196 88 39 8 61	403 161 94 15 133	692,546 tons 33,845 tons 1,675 tons 912,547 tons	1,763 845 355 10 553	12.9 20.3 10.3 -41.9 6.3
Clay Products Brick Drain Tile Structural Tile(3A)	) 2	<u>70</u> 70	<u>163</u> 163	6,229,500 units 2,039,414 units 3,625 tons	415 241 109 65	8.4 -5.5 16.7 89.1
Total	46	755	1,991		7,267	24.2
	direction.					
CARLETON						
Non Metallic Mineral Waters	$\frac{1}{1}$	(5)	-	1,500 gals.	(4)	0.0
Structural Materials Limestone Sandstone Sand and Gravel	14 2 8	91 51 8 32	217 135 15 66	663,880 tons 1,675 tons 512,155 tons	1,064 778 10 276	14.0 23.3 -41.9 -2.9
Clay Products Brick Drain Tile Structural Tile(3A)	) <u>1</u> ) 1	<u>46</u> 46	<u>119</u> 119	6,229,500 units 693,000 units 3,625 tons	334 241 27 .65	6.5 -5.5 15.5 89.1
Total	16	137	337		1,399	12.1
20002	lander over the same of the same over the sa					

#### LANARK

Mineral	Emp -ers	oloy -ees No.	Payroll	Volume Shipped Or Used	Val 1952 \$'000	1951-1952
Non Metallic Feldspar Mica, amber Phosphate	9 1 8	(2) (5)	(2)	1,361 tons 277,766 lbs.	21 18 3	-63.1 -66.4 -15.6 (1B)
Structural Materials Limestone Quicklime Sand and Gravel	5 1 1 3	20 3 10 7	41 6 25 10	360 tons 2,492 tons 139,716 tons	156 (4) 60 95	22.9 -46.4 -1.4 46.2
Total	14	20	41		177	-3.6
PRESCOTT						
Structural Materials Limestone	2 2	17 17	6	14,574 tons	31 31	<u>-39.4</u> <u>-39.4</u>
Total	2	17	6		31	-39.4
RENFREW						
Metallic Calcium ) Magneusium)	$\frac{1}{1}$	431 431	1,256 1,256	(19)	4,812	<u>33.0</u> 33.0
Non Metallic Graphite	1	<u>58</u> 58	169 169	2,040 tons	256 256	10.6
Structural Materials Limestone Quicklime Sand and Gravel	8 2 2 4	62 11 29 22	135 9 69 57	9,732 tons 31,353 tons 260,001 tons	502 25 295 181	22.0 116.8 13.1 30.8
Clay Products Drain Tile	1	24 24	4 <u>3</u> 4 <u>3</u>	1,346,414 units	81	17.1 17.1
Total	11	575	1,604		5,650	30.5
RUSSELL						
Non Metallic Mineral Waters	1	(5)	, -	870 gals.	(4)	-3·3 -3·3
Structural Materials Limestone Sand and Gravel	2 1	6 6(14 (5)	) 4	4,000 tons 675 tons	10 (4)	-74.2 37.6 -99.7
Total	3 =	6 =	4 =		10	-73.7

# REGION - 14 - HIGHLANDS

	Emp	loy		Volume Shipped	Val	ie 1951-1952
Mineral	-ers	-ees No.	\$'000	Or Used	\$'000	% Change
Non Metallic Feldspar Mica, amber	<u>3</u> 1 2	79 4 75	125 4 121	1,367 tons 202,160 lbs.	121 14 107	-63.1 -15.9 -65.6
Structural Materials Granite and Trap Limestone Sandstone Sand and Gravel	8 1 1 1 5	23 2 8 (5) 13	51 2 19 - 30	487 tons 7,000 tons 189 tons 239,645 tons	217 5 64 1 147	103.8 124.0 14.3 (1A) 204.7
Clay Products Brick ) Clay ) Drain Tile )	<u>5</u>	<u>34</u> 34	<u>39</u> 39	1,269,000 units 1,116 tons 94,000 units	74 50 18 7	38.7 56.6 17.2 2.7
Total	16	136	215		412	-15.4
HALIBURTON						
Structural Material Limestone Sandstone	s <u>2</u> 1	8 8 (5)	19 19 -	7,000 tons 189 tons	65 64	16.3 14.3 (1A)
Total	2 =	- 8 =	19		65	16.3
MUSKOKA					•	
Structural Material Sand and Gravel	s <u>1</u>	<u>3</u>	$\frac{1}{1}$	13,385 tons	1 <u>5</u>	117.3 117.3
Clay Products Brick ) Clay ) Drain Tile )	<u>3</u> 3	<u>21</u> 21	<u>28</u> 28	819,000 units 1,116 tons 69,000 units	53 30 18 5	
Total	4 =	24	32		. 67	
NIPISSING						(
Non Metallic Feldspar Mica, muscovite	3 1 2	79 4 75	125 4 121	1,367 tons 202,160 lbs.	121	-14.1
Structural Materia Sand and Gravel	ls 2	8 8	2 <u>1</u>	140,805 tons	119	
Clay Products Brick ) Drain Tile )	1		7 7	350,000 units 25,000 units	11	
Total	- 6		154		25'	7 -31.9

#### PARRY SOUND

Metallic Gold Silver

Non Metallic

Asbestos

Quartz(22)

Tungsten(21))

Structural Materials 8

Sand and Gravel

Total

Mineral		loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Val 1952 \$1000	ue 1951-1952 % Change				
Non Metallic Feldspar		-	-	-	-	(1B) (1B)				
Structural Materials Granite and Trap Sand and Gravel	3 1 2	· 4/2 2	<u>6</u> 2 4	487 tons 85,455 tons	18 5 13	68.6 124.0 53.8				
Clay Products Brick	$\frac{1}{1}$	$\frac{7}{7}$	1+	100,000 units	<u>5</u>	316.7 316.7				
	-		*****		_					
Total	14	11	10		23	88.5				
	=				-					
REGION -15- CLAY BELT										
Metallic Bismuth Cobalt Copper Gold Lead Nickel Silver Tungsten(21) Zinc	<u>52</u> <u>11</u>		38,581 38,581	229,152 lbs. 485,141 lbs. 1,987,139 troy oz 1,803,455 lbs. 76,230 lbs. 5,195,234 troy oz 50,734 lbs. 744,920 lbs.	292 40	0.1 (1B) -0.4 48.2 -2.4 (1A) 44.4 37.8 (1A) (1A)				
Non Metallic Arsenic(20) Asbestos Quartz(22)	2 (20) 2	281 (20) 281	1,049 (20) 1,049	1,588,381 lbs. 23,096 tons	3,934 71 3,863	1.6 -24.3 2.4 (1B)				
Structural Materials Limestone Sand and Gravel	13 1 12	38 5 33	87 15 73	4,588 tons 1,424,690 tons	637 21 616	26.0 2.8 26.9				
Total	67 12,	110	39,717		79,440	0.4				
TOURT	0 112,		57,121							
COCHRANE										

21 7,052 23,197

31 7,341 24,261

23,197

1,049 1,049

21 7,052

(1952)

2.9

-14.2

(1A)

(1B)

22.6

22.6

3.0

391

391

44,784

1,163,346 troy oz40,191 213,574 troy oz. 175 50,734 lbs. 165

23,096 tons

1,202,720 tons

#### TIMISKAMING

TIMISKAMING							
	Em	ploy		Volume Ship		Valu	
Mineral	-ers		Payroll \$'000	Or Used		1952 \$'000	1951-1952 % Change
Metallic	No.	4,739	15,384			34,338	-3.0
Bismuth ) Cobalt ) Copper ) Gold ) Lead ) Nickel ) Silver ) Zinc )	31	4,739	15,384	229,152 1 485,141 1 823,793 t 1,803,455 1 76,230 1 4,981,660 t 744,920 1	lbs. croy lbs. lbs. troy	637 138 0z.28,940 292 40 0z. 4,160 131	(1B) -0.4 48.2 -8.6 (1A) 44.4 41.4 (1A)
Non Metallic Arsenic (20)	(20	) (20)	(20)	1,588,381 1	lbs.	$\frac{71}{71}$	<u>-24.3</u> <u>-24.3</u>
Structural Materia Limestone Sand and Gravel	ls <u>5</u> 1 4	30 5 25	72 15 57	4,588 t 221,970 t		246 21 225	31.8 2.8 35.3
Total	36	4,769	15,456			34,656	-2.9
	-						
		REG]	ION -16- I	NICKEL RANGE			
Metallic Gold Cobalt ) Copper Nickel Platinum Metals) Selenium Silver Tellurium )	2	18,108 159 17,949		1,192,771 1 250,230,034 1 281.040,842 1	lbs. lbs. troy lbs. troy	70,843 151,626 oz. 18,476 265	-0.7 22.8 90.4 0.1 0.3 -17.9 -0.7 -3.3 -16.3
Non Metallic Fluxing Sand Quartz (Silica) Silica Flux (Gra Sulphur (26)	) 5 ) 5 [ve])) (26	147 147(2	25) 361(	73,233	tons tons	1,419 81 1,116 38 183	2.0 -6.6 1.2 -14.8 17.6
Structural Materia Limestone Sand and Gravel	1	191 (27 191	595 (27 595			1,135 37 1,098	90.7 15.8 95.0
Total		18,446	70,042			250,296	-0.5
MANITOULIN							
Non Metallic Quartz (Silica)	<u>3</u> 3	110	218 218	223,679	tons	758 758	-1.2 -1.2
Total	3	110	218			758 <del></del>	-1.2

SUDBURY

Mineral	Er -ers	mploy -ees No.	Payrol \$'000	Volume Sh Or Used		Valu 1952 \$'000	e 1951-1952 % Change
Metallic Gold Cobalt ) Copper ) Nickel Platinum Metals) Selenium Silver Tellurium )	2	18,108 159 17,949(		1,192,771 250,230,034 281,040,842	lbs. lbs. troy lbs. troy	70,843 151,626 0z 18,476 265	-0.7 22.8 90.4 0.1 0.3 -17.9 -0.7 -3.3 -16.3
Non Metallic Fluxing Sand Quartz (Silica) Silica Flux (Grad Sulphur (26)	) 2 ) 2 vel) (26	37 37(2 5) (26)		73,233	tons tons	38	5.9 -6.6 6.5 -14.8 17.6
Structural Material Limestone Sand and Gravel	ls <u>7</u> 1 6	191 (27) 191	595 (27) 595				90.7 15.8 95.0
Total		18,336				249,538	-0.5
			REGION -1	7- SAULT			
Metallic Iron Ore Gold ) Silver )	3 1 2	689 688 1	2,780 2,778 (5) 2	1.5	tons troy troy	oz. 6	-12.1 -12.2 (1A) (1A)
Non Metallic Silica Brick	1	4 <u>3</u>	145 145	1,161,000	units	246	20.2
Structural Material Sand and Gravel	s <u>2</u>	2 <u>1</u> 21	7 <u>1</u> 71	59,204	tons	67 67	53.0 53.0
Clay Products Brick ) Drain Tile )	<u>1</u> 1	<u>12</u> 12	14 14	1,004,445			24.1 26.3 -3.4
Total	- 7 =	. 765	3,011			8,457	-11.0
		RE	EGION -18	- LAKEHEAD			
Metallic Gold ) Silver ) Iron Ore	9 8 1	1,336 644 692	4,681 2,073 2,607	120,092 9,652 1,427,276	troy	15,759 oz. 4,240 oz. 8 11,511	-7.5 -16.1 -8.4 -3.9
Non Metallic Peat (Moss)	$\frac{1}{1}$	18 18	9 9	2,572,579	lbs.	45 45	-14.7 -14.7
Structural Material Granite and Trap Sand and Gravel	s 6	<u>37</u> 37	<u>81</u> 81	196,334	tons	107 107	-87.0 (1B) -6.2

# LAKEHEAD (continued)

HAIBIIDID (	,					
Mineral	rers	loy -ees No.	Payroll \$'000	Volume Shipped Or Used	Value 1952 1 \$'000 %	951-1952 Change
Clay Products Brick Structural Tile	No.	31 31	61 61	2,023,607 units 1,478 tons	104 82 22	-11.5 -4.1 -31.7
Total	17	1,422	4,832		16,015	-11.1
KENORA						
Metallic Gold ) Silver )	2 2	34 34	164 164	(28)	(28)	(28)
Structural Materi Granite and Tra Sand and Gravel	p -	<u>1</u> 4	3 3	7,096 tons	11 	-25.3 (1B) -11.1
Total	4 =	38	167		11	-25·3 
RAINY RIVER						
Metallic Iron Ore Gold ) Silver )	2 1 1	692 692 (5)	2,607 2,607 -	1,427,276 tons 40 troy 4 troy	oz. 1	-3.8 -3.8 (1A) (1A)
Non Metallic Peat (Moss)	1	18 18	<u>9</u> 9	2,572,579 lbs.	45 45	<u>-14.7</u> <u>-14.7</u>
Total	3 =	710	2,617		11,557	-3.9
THUNDER BAY						
Metallic Gold ) Silver )	<u>5</u> 5	<u>610</u> 610	1,909 1,909	120,052 troy 9,648 troy	oz. 4,246 oz. 4,238 oz. 8	-16.1 -16.1 -8.4
Structural Mater Granite and Tr Sand and Grave	ap -	33 - 33	78 - 78	189,238 tons	97 - 97	-88.0 (1B) -5.7
Clay Products Brick Structural Til	) 1	<u>31</u> 31	<u>61</u> 61	2,023,607 units 1,478 tons	104 82 22	-11.5 -4.1 -31.7
Total	10		2,048		4,447	-25.7

#### REGION -19- JAMES BAY

#### KENORA (PATRICIA PORTION)

Mineral	Employ -ers -ees No. No.	Payroll \$'000	Volume Shipped Or Used	Valu 1952 \$'000	e 1951-1952 % Change
Metallic Gold ) Silver )	12 1,447 12 1,447	4,688 4,688	321,764 troy 42,937 troy		-12.4 -12.4 -23.0
Total	12 1,447	4,688		11,305	-12.4

#### FOOTNOTES

- 1A. No Production in 1951. 1B. Production in 1951 but not in 1952.
- 2. Not available
- 3A. Hollow Blocks. 3B. Floor Tile (quarries). 3C. Roofing Tile.
- 4. Value less than \$1,000.
- 5. Some establishments are worked by owners and /or purchasers.
- 6. Wentworth county production included under Haldimand County.
- 7. Shown under Haldimand County.
- 8. Refinery.
- 9. Shown under Sudbury District where the ore was mined.
- 10. Lincoln County production included under Haldimand County.
- 11. Includes Lincoln and Wentworth counties production.
- 12. Middlesex County production of petroleum included under Lambton County.
- 13. Middlesex County production shown under Elgin County.
- 14. Part-time workers.
- 15. Content of Brine.
- 16. Shown under the District of Timiskaming where the ore was mined.
- 17. Does not include prison labour but includes their production and value.
- 18. Included under cement.
- 19. Not available for security reasons.
- 20. By-product from silver-cobalt refining, included with Metallic Minerals.
- 21. Concentrates WO3.
- 22. Grinding Pebbles.
- 23 Includes employees in the mines, smelters and refinery.
- 24. Small amount was produced by gold mines.
- 25. Additional figures are included under nickel.
- 26. By-product from nickel-copper refining included with Metallic Minerals.
- 27. Included with nickel-copper industry.
- 28. Gold and silver mines are operating but not producing.

#### FORESTRY

The Province of Ontario covers about 413,000 square miles, of which 49,300 are water. Approximately two-thirds of the land is covered with forest. Of the 237,000 square miles of forest, some 173,000 square miles are considered to be actually or potentially productive. The distribution of this land is given in the table below:

			Total Merchantable
	Merchantable	Young Growth	and Young Growth
	(square miles)	(square miles)	(square miles)
Softwoods	36,900	29,300	66,200
Hardwoods	5,900	10,200	16,100
Mixed Woods	24,100	67,400	91,500
Total	66,900	106,900	173,800

A large fraction (perhaps four-fifths) of the productive forest is near enough to transportation facilities and markets to be productive in the economic sense.

The figures on the area of forests have a certain interest, but give little indication of the actual volume of timber, or of its rate of growth. Since 1946, the Ontario Department of Lands and Forests has been surveying the forests to supply this information. The Federal Government has contributed one-half of the cost since April 1951. The surveying has been done by several methods. The entire forest area of 173,000 square miles has been photographed from the air (photos were the sources for maps). Ground crews systematically took samples which were used to estimate timber volume. In addition, licensees, in order to cut timber on Crown Land (nearly all of Ontario's forests are Crown land), are required to make complete inventories of their claims. Figures have been calculated for sixteen districts which cover roughly the same area as Economic Regions fourteen to eighteen. However, no direct comparison is possible as forestry district boundaries are not co-terminal with either the Economic Regions or the census sub-divisions. The ten reports which have been issued to date indicate wide disparities, with total growth exceeding total cutting in some areas, equal to it in some, and with over-cutting of some species in other areas.

For example, in the Parry Sound district, the annual allowable(1) cut on Crown land is 9,876,000 cubic feet. The actual cut (for all species) is 16,120,000 cubic feet. Over-cutting has removed nearly all the mature white and red pine, spruce, hemlock, and birch. Conifers, on balance, are over-cut, and hardwoods slightly under-cut. Thus the more undesirable trees will predominate.

The Timiskaming district, farther north, has been more fortunate. Conifers are being cut to only seventy per cent. of the allowable cut. Only twelve per cent. of the hardwood allowance is being used, making these relatively unpopular trees still more common.

The Geraldton district, opened up only twenty-five years ago, shows a similar situation: approximately 55 per cent. of the total allowable cut is of conifers, and 47 per cent. of this is being used, while only 6 per cent. of the hardwood allowable cut is utilized. No doubt the remaining six districts will show a similar pattern of cutting.

The forty-two counties of Southern Ontario cover 34,600 square miles or ten per cent. of the area of the Province. This excludes parts of several eastern counties included in the fire protection district of Northern Ontario. Nearly all of Southern Ontario (19 million out of the total 22 million acres) is assessed land. In 1900, 16.6 per cent. of the assessed land was forested while only 9.7 per cent. (1.8 million acres) was forested by 1943. The figure varied from 2.8 per cent. in Essex to 27.5 per cent. in Renfrew. York, in spite of its great population, has 4.7 per cent. of its private land in forest. County forests in the Province covered 76,500 acres in 1952 -- a minute fraction of the total area of those counties. Statistics of these private woodlots should be treated as estimates

(1) "Allowable" cut refers here to the largest cut consistent with the maintenance of forest productivity. Any cut in excess of this amount means that the rate of depletion is greater than the rate of replenishment.

In 1951 the Department of Lands and Forests owned 41 planes, 313 fire towers, and many other items - pumps, hoses, radio sets and 3,567 miles of telephone wire. In addition, privately owned equipment, including 441 bulldozers, was used when necessary.

The future demands made on Ontario forests will depend largely on the tastes, incomes, and numbers of American citizens (who are increasing at the rate of 2,500,000 a year). It has been estimated that a large fraction - between onethird and one-half of all the world's (excluding the U.S.S.R. and its allies) raw materials (except food) is annually used in the United States, a country with about ten per cent. of the world's population. This rate of consumption is increasing, partly because of increasing population, and partly because of rising living standards. The results of this great demand are an anticipated shortage at home and a great deal of exploration abroad by American industries. Much of this shortage is of minerals - oil (the United States uses about two-thirds of the world's production), iron, lead, copper, etc. with which this section is not concerned. However, there is good reason to believe that saw timber in the United States is being cut 40 per cent. faster than it is being grown. The definition of potential saw timber is very liberal, and includes low quality and small trees. Total cutting is, on the other hand, somewhat less than total growth. In spite of this, the United States is a net importer of paper and wood products. The total volume of timber used has declined about one per cent. since 1900, largely because little wood is used now as fuel. Per capita annual consumption of newsprint in the United States has increased from 30.4 pounds in 1931 to 78.4 pounds in 1950. The rise has not been steady and for this reason predictions are unreliable. However, almost all of the increase in consumption has been made possible by Canadian exports. There is little reason to believe that this trend will change. Thus, the volume of timber growth (a fairly steady figure) must be considered with respect to a constantly rising American demand for paper and lumber.

While a large part of all timber is cut in the winter, operations are carried out in other seasons as well. In January, 1953, there were 82,100 men employed in forestry in Canada of which Ontario had 19,000 or about one-quarter. In July, the total dropped to 58,400 for Canada and 14,800 for Ontario. Average weekly wages and salaries in Ontario for July were \$58.65. The figures do not represent complete coverage because persons working for firms with fewer than fifteen employees (or working as independent contractors) are not counted.

In sharp contrast to the fluctuating employment in logging, the industries dependent on it for raw material have very steady employment. Canadian pulp and paper mills in 1951 had an average employment of 57,300 workers. The largest number (one-half) was in Quebec and about one-third was in Ontario. There were 19,100 employed in Ontario in July, 1953.

The total value of production of wood and paper industries in Canada was 15.3 per cent. of the gross value of production for all manufacturing in 1951. Pulp and paper accounted for about one-half of this (7.5 per cent. of all manufacturing value). The wood and paper industries were slightly less important in Ontario since they accounted for only 9.1 per cent. of all manufacturing production value. However, the forest industries provide a large market for the goods of other manufacturers and hence their actual importance is larger than indicated, although no precise estimate is possible.

In 1952, forest products were 31.8 per cent. of all exports of Canadian produce, gold excepted. More specifically, forest products exports were \$1,368,787,000 out of total exports of \$4,301,080,000. About two-thirds of the forest products exports were paper and woodpulp. Newsprint alone (\$591,790,000) made up 13.7 per cent. of all exports. The United States took \$1,081,016,000 worth of forest products, or 79.1 per cent. of forest product exports, and 46.9 per cent. of all domestic exports to that country.

The forest industries, in spite of their great size and importance to Canada, have spent very little on research. This may have been due, in part, to the extreme cheapness of wood in the past, the small scale of many individual operations, and to the oscillations of trade cycles which inhibited any long-range planning.

as they are gathered by township tax assessors whose standards of measurement vary considerably. Few woodlots are managed efficiently (many are not managed at all). Discussion of the reasons for this failure is given in the 1947 Report of the Royal Commission on Forestry (pages 65-92). The various estimates as to what part of the land should be reforested are also given. The Commission estimates that the present area might be tripled profitably.

Total cutting of timber in Canada was 3,602,957,000 cubic feet in 1951, and about 3,545,163,000 cubic feet in 1952. The greatest volume was cut in Quebec (33.8 per cent. of the total), British Columbia came next (23.0 per cent.), and Ontario was in third place (695,877,000 cubic feet, or 19.3 per cent. of all cutting). Cutting in Ontario has increased only 10.5 per cent. since 1926, whereas it rose 47.6 per cent. for Canada in the same period (1926-1952), 67.8 per cent. in Quebec, and 42.8 per cent. in British Columbia.

In Canada, about 39.1 per cent. of the volume of timber in 1952 consisted of bolts and logs (for sawmill use), 35.5 per cent. was for pulpwood, and 22.7 per cent. was used for fuel. Pulpwood contributed 48.8 per cent. of the total value of forest products, while firewood was worth only 6.5 per cent. of the total.

Total depletion of Canadian forests was about 25 per cent. greater than the commercial cut. Approximately 83 per cent. of depletion represents utilization, the other 17 per cent. being waste. Insects, disease, etc. (2) are considered to be more dangerous to the forests (13 per cent. of depletion) than fires (4 per cent.). However, the latter figure fluctuates rather violently.

There were, in Ontario, 1,834 recorded forest fires in 1949, 985 in 1950, and 904 in 1951. These fires burned in those years 60,065 acres, 37,780 acres and 101,243 acres, respectively. The figure of four per cent. does not represent a fair evaluation of timber destroyed as immature stock with no present value is burned. The causes of fires so far as they are known are given in the table below for 1951:

Causes Lightning Logging Smokers Campers Railways Settlers Incendiary	Number of Fires 151 38 173 191 139 74 16	Acres Burned 84,027 9,051 4,106 1,546 934 595 357
Incendiary Construction Mining Miscellaneous	28 12 82	289 9 329
TOTAL	904	101,243

It is interesting to note that, while most of the fires are apparently of human origin, this type seems to do the least damage. Perhaps later figures will modify this conclusion. The figures given are not as precise as they seem since causes may be listed under several headings (all correct) and fires of unknown cause may be assigned to a probable one. Apparently most fires are started by campfires and cigarettes of local citizens - Indians are not responsible for more than a small fraction of the fires (except in areas inhabited largely by them), nor are tourists (except in parks). Incendiary fires are reported to be often the result of desires to obtain work, to spite a neighbour or the government (in the Maritimes), or to open land to settlement (in Quebec, Ontario, and the West). "Firebugs" are not considered to be of much importance. Foresters feel that stricter control of forest travel and slash burning permits is the best means of fire prevention. Education and advertising are of little value alone, but important in combination (i.e. radio and newspaper advertising must be supplemented with talks to school children, settlers, etc.). Criminal prosecution is not considered to be a sufficiently effective deterrent in itself.

<sup>(2)</sup> The "etc." includes timber wasted in felling operations. No details are available as to its amount, although there are indications that it is heavy.

Studies in the growth and care of trees (the technical term is "silviculture") began about 1899 but interest in this field languished until recently. Some degrees in Forestry Engineering are given at several Universities: Toronto, New Brunswick, Laval and British Columbia. There were 489 students in these courses in April 1953 (about one-third of them at Toronto) - less than one per cent. of all Canadian undergraduates. The first experimental forest was established at Petawawa, Ontario, by the Federal Government in 1917. It was followed by four other experimental stations, and two forest products' laboratories at Ottawa and Vancouver.

The Ontario Government is interested in several projects, some carried out in co-operation with other agencies. The Ontario Department of Lands and Forests has an experimental station at Maple, and operates a research project at Petawawa for the Forestry Branch of the Federal Department of Resources and Development. A new project was started recently at Heron Bay (District of Thunder Bay) by the above mentioned Departments in conjunction with the Federal Department of Agriculture, the Ontario Research Council, the Pulp and Paper Research Institute, the Ontario Paper Company, and the Abitibi Power and Paper Company. The Pulp and Paper Research Institute has headquarters at Montreal and is supported by the Federal Government, the Canadian Pulp and Paper Association, and McGill University.

The Ontario Research Foundation, various pulp and paper companies, as well as McMaster, Queen's and Toronto universities, are interested in the chemistry of wood and of pulp mill wastes. This latter is of some importance, as about three million tons of sulphite "liquor" are wasted in this country every year. To this waste, must be added the pollution damage to rivers caused by dumping the "liquor".

#### THE FISHING INDUSTRY

Commercial fishing is today of little importance in the Province. There were about four thousand fishermen in 1952, but exact figures are somewhat elusive in a seasonal industry such as this.

Equipment used in fishing in 1951 consisted of about 130 tugs, two thousand small boats (of which nearly one-half were gasoline-powered), 480 ice houses, 420 piers, and thousands of yards of nets. It was worth roughly seven million dollars, or about one year's gross income in the industry.

The catch (38 million pounds in 1952, worth \$7.4 million at the pier) represented approximately four per cent. of the value of all Canadian commercial fishing. The yield showed a rise of seven million pounds from 1951, or 22 per cent., and was 5.2 million pounds greater than in 1952. Approximately four-fifths of the fish are caught in the Great Lakes. The largest 'harvest' comes from Lake Erie (17.4 million pounds in 1952 or 46 per cent. of the total). Production in all areas was as follows:

Lake Erie Lake Ontario Lake St. Clair Lake Huron Georgian Bay North Channel Lake Superior	2,281,317 792,150 1,735,562 5,359,210 432,856 3,127,432	11 11 11	(Blue Pickerel, Perch, Whitefish) (Coarse and Mixed, Catfish, Carp) (Coarse and Mixed, Carp) (Perch, Whitefish, Yellow Pickerel) (Largely Whitefish) (Whitefish, Trout, Mixed and Coarse) (Trout, Herring, Yellow Pickerel, Saugers)
Total Great Lakes System	31,145,344	. п	
Northern Inland Waters	6,220,566	11	(Yellow Pickerel, Whitefish, Pike Goldeyes, Coarse and Mixed)
Southern Inland Waters	678,139	11	(Mixed and Coarse, Carp, Catfish)
Grand Total	38,044,049	11	

It is interesting to compare these figures with those of American Great Lakes' fisheries. In 1949 about 85.7 million pounds of fish worth \$11.5 million were caught. As in Canada, the greatest amount (34.2 million pounds) was gathered from Lake Erie. The second largest catch was in Lake Michigan (25.6 million pounds). Lakes Superior and Huron were next (17.7 million pounds and 5.6 million pounds, respectively). There was very little fishing in Lake Ontario. Total yield for the International Lakes (i.e. all except Michigan) was more than twice the Ontario figure for the same waters. American figures show great variations in fisheries production but do point to a slight decline over the past sixty years.

The most common species caught in Ontario are Pickerel, Whitefish, Perch, Lake Trout, and Herring. Variations in the amounts of each kind of fish caught are often greater than variations in the total catch for the Province. The same is true of changes in the catch for individual lakes. Lake Erie, for example, had a catch of 13,144,053 pounds in 1951. In 1952 the catch was greater by 33 per cent.

A certain amount of fisheries research is carried on by the various governments in the Great Lakes area. The Department of Lands and Forests which has jurisdiction over all Provincial fisheries has recently opened a laboratory at South Baymouth, on Manitoulin Island. There is also a laboratory at Maple' near Toronto. The Department also maintains twenty-nine fish hatcheries which distributed 378 million fish in the fiscal year ending March 31, 1952. Because of the number of uncontrollable factors involved, and the difficulty of taking samples in anything as large as the Great Lakes, it is impossible to assess the value of hatcheries in maintaining the fish population.

It is interesting to note the comparatively small consumption of fish in Canada. In 1951 per capita consumption was only 13.4 pounds, as compared to 23.2 pounds of poultry, and 133.9 pounds of meat.

#### THE FUR INDUSTRY

The fur trade, despite its early role in the economic development of canada, is today of very little importance to this country. There were about 6,500 fur farms in Canada in 1930, 4,050 in 1949, and only 3,070 by 1951. Ontario had about 900 farms at the end of that year, with more than eighty thousand animals. About 90 per cent of these animals are mink, and the remainder is made up largely of foxes. Thirty years ago about 90 per cent. were foxes, while mink were rare.

The value of pelts from all Canadian sources has followed an odd course for a luxury business. In the season 1928-29 the value was high (\$18.8 million); it dropped quite low in 1932-33 (\$10.3 million) rose to a peak during 1945-46 (\$43.9 million) and, with fluctuations, reached a level of \$24.2 million in 1951-52.

Total income from the pelts of farm bred animals in Canada was \$10.1 million for the season 1951-52. (The season is the year ending June 30th.)

Ontario fur farms received \$2.4 million for 152,000 pelts in 1951-52.

Pelts from trapped animals in Canada (numbering 7.3 million) in 1951-52 were worth \$14.1 million or about three-fifths of the total for all pelts. Ontario trappers caught \$3.7 million worth of furs. This Province was the largest Canadian supplier of furs from all sources, with more than one-quarter of the total value. The most valuable animals trapped were muskrat (about 35 per cent. of total value), beaver (also about 35 per cent.), and mink (about 20 per cent.)

Canadian exports (\$24.4 million in the calendar year 1952), and imports (\$23.5 million) are of considerable importance compared with home production of furs, and tend to cancel out one another in international trade balances. Some 80 per cent. of exports go to the United States and 16 per cent. to the United Kingdom whereas 74 per cent. of the imports are from the United States and 8 per cent. from the United Kingdom.

Fur farming and trapping provide raw materials for a small fur goods industry concentrated largely in the big cities.

#### THE FUR GOODS INDUSTRY, 1951

	Establishments	Employees	Gross Value of Production
Ontario	228	1,944	\$20,917,035
Canada	612	6,084	\$61,209,546

Source: Dominion Bureau of Statistics, Ottawa.

Almost all of Ontario's production is in Toronto, and a large share of the out-of-province trade belongs to Montreal. Approximately three-quarters of total Canadian sales value comes from women's coats and jackets (numbering more than 200,000 in 1951). Orly about 630 men's coats were sold in 1951.

#### ELECTRIC POWER

Ontario, in spite of having almost no local supplies of fuel for the production of energy, is one of the most industrialized and prosperous provinces in Canada. That this is so, is due in large part to the utilization of abundant water power resources to generate cheap electricity. The efficient mining, smelting and refining of base and precious metals; the growth of the pulp and paper industry to its present important position in the Canadian economy; the development of a large and varied manufacturing industry; and the rising standard of living, especially in rural areas, have all been made possible through the use of this cheap electrical power.

In Canada as a whole, about 96 per cent. of the electrical energy produced by central electric stations (1) is generated by water power. This has been fundamental in providing Canada with one of the lowest rates per kilowatt hour in the world. In the United States the average residential or domestic customer, including farm customers, paid 2.81 cents per kilowatt hour in 1951. In Canada he paid 1.65 cents. Commercial and industrial customers in the United States paid 1.4 cents per kilowatt hour, while in Canada the rate was 0.6 cents per kilowatt hour.

In Ontario, up until the end of 1951, over 99 per cent. of all electrical energy generated by central electric stations was produced by hydro-electric plants. During 1952 this dropped to 97.6 per cent. The growing use of fuel-electric stations is illustrated by the fact that in 1952 the annual production for commercial load purposes produced by the Ontario Hydro thermal stations was 413.8 million kilowatt hours, or nearly four times the amount generated in 1951. It is also reflected in the growing capacity of fuel installations. In 1951, 253,700 horsepower or 7 per cent. of the total capicity (3.6 million horsepower) of primary equipment in central main plants was provided by fuel installations. By 1952, this had risen to 14 per cent. It is estimated on the basis of recent construction, that by the end of 1954 fuel-electric stations will have a capacity of 921,200 horsepower, or about 18 per cent. of primary main plant capacity. The largest fuel-electric plant in Canada, the Richard L. Hearn generating station at Toronto, has four units operating, three at 60 cycles and one at 25 cycles. When the last unit is changed over to the higher frequency, the four-unit plant will have an installed capacity of 536,000 horsepower.

Thermal generators are also used in other provinces. In Prince Edward Island, for example, they are used almost exclusively. In Nova Scotia and Saskatchewan, they generate about half the electrical energy produced, and in Alberta and New Brunswick about one-third. The other four provinces produce most of their electricity from water power.

In 1951 there were 141 central electric stations in Ontario, comprising 128 hydraulic and 13 fuel-using plants. During that year the 1,162,700 domestic (including farm) customers consumed 4.1 billion kilowatt hours. Annual average domestic consumption per capita in Ontario was 902 kilowatt hours while for Canada as a whole, it was 551 kilowatt hours. The number of domestic customers in Ontario increased by 61.5 per cent. between 1939 and 1951, while the amount of energy consumed rose 86.9 per cent. Ontario, with less than one-third of the population of Canada, consumed more than half the total amount of energy used by domestic customers in the country as a whole.

Ontario ranks third among the provinces in available water power resources, Quebec and British Columbia standing first iand second, respectively. In terms of installed capacity and production of electrical energy, Ontario is second, being surpassed only by Quebec. In 1951, Quebec produced 54.1 per cent. of the total

<sup>(1)</sup> All statistics in this section refer only to central electric stations i.e. "Companies, municipalities, or individuals selling or distributing electric energy, whether generated by themselves or purchased for resale". Power which is generated by a company only for its own immediate consumption is not included. Almost all new developments, however, are now of the central station type where hydro-electric plants, although built to serve a particular industry, sell their surplus power to the surrounding area.

national output of electrical energy while Ontario produced 29.1 per cent. In the same year, Quebec generated 56.0 per cent. of total hydro-electric and 0.7 per cent. of total fuel-electric energy. Ontario produced 29.9 per cent. and 7.3 per cent., respectively.

Of the total amount of electrical energy generated by central electric stations in Canada in 1951, 44 per cent. was produced by publicly-owned generating facilities, either provincial or municipal, while in Ontario it was about 89 per cent. Ninety-seven of the 141 central electric stations are publicly owned.

The largest publicly-owned utility in Ontario, and in Canada, is the Hydro-Electric Power Commission of Ontario which, in 1952, was producing about 87 per cent. of the primary energy consumed in the Province. The Commission was created in 1906 and at that time acted solely as a distributor of electrical power produced by private companies. To-day the Commission generates, buys and distributes electricity. During 1952, the Commission operated sixty-four hydraulic and eight thermal electric stations which produced 15.3 billion kilowatt hours for commercial load purposes. An additional 4.7 billion kilowatt hours was purchased under regular, temporary and short-term power agreements, most of it coming from Quebec. The amount of energy generated in 1952 exceeded that generated in 1945 by 79.3 per cent., while the amount purchased increased by only 16.6 per cent. The amount of energy available for distribution in Ontario, reached a high of 18.8 billion kilowatt hours.

Hydro operations are carried out by two separate systems - the Southern Ontario System and the Northern Ontario Properties. The latter system is divided into a Northeastern and a Northwestern Division. Each Division is an integrated power system and there is no inter-connection between them. Since 1950, however, the Northeastern Division has been interconnected with the Southern Ontario System. In each system the Commission's customers include municipal electrical utilities, certain large industrial users and retail customers in rural operating areas. In 1952, the total number of ultimate customers, served either directly or indirectly by the Ontario Hydro, was 1,317,000, an increase of five per cent. over 1931 and 82 per cent. over 1939.

Industrial power customers served directly by the Commission totalled 200 in 1952 and consumed 6.5 billion kilowatt hours of primary and 1.1 billion kilowatt hours of secondary power. This is an increase of 4.8 per cent. in consumption of primary, and a decrease of 5.3 per cent. in secondary power, from 1951. Such customers included mines and paper companies in Northern Ontario as well as a number of basic industries in Southern Ontario. In 1952, there were 836,800 domestic service customers not including those served through rural operating areas. Each of these customers consumed a monthly average of 351 kilowatt hours, an increase of 71 per cent. over 1945. Their total consumption of energy in 1952, was 3.5 billion kilowatt hours. Commercial light customers consumed 1.4 billion kilowatt hours of electrical energy in 1952, while average monthly consumption was 1,008 kilowatt hours or 61 per cent. higher than in 1945.

The extensive use of electricity in rural areas has led to reduced costs, increased production and a higher standard of living. The Provincial Government has, since 1921, paid half the cost of all primary lines to serve rural consumers, in order to extend the use of electricity in rural areas. It has thus been possible for the Commission to reduce the cost of electricity and at the same time greatly increase the number of people served. By the end of 1952, the Commission was serving 343,500 rural customers, an increase of 7.8 per cent. over 1951. Energy consumed by all rural (including power service) customers, amounted to 1.1 billion kilowatt hours. Since 1944 there has been a uniform rural rate structure for farm, hamlet, commercial and summer service throughout the Province. According to a Dominion Bureau of Statistics census bulletin, 73.8 per cent. of all farms in Ontario had electric power in 1951, whether from the Commission or other sources.

A programme of frequency standardization was initiated by the Commission in 1949 to convert the 12,000 square mile "25 cycle island" in Southern Ontario, to 60 cycle. The programme will not be completed until about 1960. Since the original estimates for conversion were made in 1947, the number of frequency sensitive items per customer has nearly doubled. The number of customers of all classes to be standardized has increased also, by more than 120,000. The increased volume of work which must now be done, plus the rising costs of labour and materials, will

raise the overall cost of standardization.

There are three main sources of hydro-electric power for Southern Ontario. With the completion of the Ontario Hydro's Otto Holden generating station (capacity 204,000 kilowatts, or 273,000 horsepower), emphasis on new construction has shifted from the Ottawa to the Niagara River. The Sir Adam Beck-Niagara generating station #2, which is now under construction at Queenston, will have an ultimate installed capacity of 1,370,000 kilowatts (1,828,000 horsepower), in sixteen units. The first four units will go into service in 1954.

The third source of power is the St. Lawrence River, and the only important undeveloped power site in Southern Ontario is the International Rapids section of this river. Considerable preliminary engineering work on the construction of a power project at this site was completed by the commission during 1953. At the beginning of 1954, only legal difficulties concerning the Power Authority, of the State of New York hindered the development of the project. Ontario's share in the joint development of the International Rapids section would be 1,100,000 horse-power or over six billion kilowatt hours per annum.

In Northeastern Ontario there are a number of undeveloped power sites. Most of these, however, are small and far from the main centres of demand so that present development is not considered to be economic. In Northwestern Ontario, which has no power connections with the rest of the Province, new developments are being undertaken to meet the growing demand for power. Two additional units are being constructed at the Pine Portage generating station on the Nipigon River. When these are placed in operation in 1955, the dependable peak capacity of the plant will be 168,900 horsepower in four units. A new generating station scheduled for service in 1956, will be built at Manitou Falls on the English River. It will have three generating units with a combined capacity of about 46,000 horsepower.

In September 1953, interconnections for the exchange of electric power were completed at Sarnia and Windsor between the Ontario Hydro and the Detroit Edison Comapny. This interconnection, believed to be the largest international exchange of power in the world, will make substantial operating economies possible for both systems. It will also provide greater service security as neither utility will be dependent on one source of power -- the Detroit Edison is essentially a fuelelectric system while the Ontario Hydro is predominantly hydro-electric. It will now be possible for the Ontario Hydro to obtain power from Detroit Edison when water conditions are poor, while in periods of high run-off, the Commission can supply power to the American company. These interconnections have a capacity of up to 400,000 horsepower. A new power exchange arrangement was approved in January 1954, between the Niagara Mohawk Power Corporation at Syracuse, New York, and the Ontario Hydro. Up to 250 million kilowatt hours of energy can be transmitted annually from the American utility to supplement Hydro facilities. Ontario is now part of a farreaching power grid which includes Michigan, New York and Quebec.

Even with all the above-mentioned additions to the supply of electric power in Ontario, it is estimated that by 1960 all available power will be in use. New fuel-electric generating stations will probably be built in order to meet the ever-growing demand. The recent decision of the Alberta Government to permit the export of natural gas, may be of great importance for the Ontario Hydro. New fuel-electric stations might be built to utilize natural gas if this fuel should prove to be less expensive than coal. It might also be economical to convert the present coal-using generators. This could be done at very little cost and within a period of months.

It is expected that in the reasonably near future it will be possible to use atomic power to produce electrical energy at a cost at least comparable to that of more conventional fuels. Considerable research is being done in this field in Canada, the United Kingdom and the United States. In Ontario, the Hydro-Electric Power Commission has undertaken to study the subject in conjunction with the research being done by Atomic Energy of Canada Limited at Chalk River. Two hundred thousand dollars will be spent in the next two years on this project.

# OCCUPIED DWELLINGS WITH ELECTRIC LIGHTING AND COOKING FACILITIES, 1951

		-Lighting F		-Cooking	Facilities-
	Occupied	No. with Lighting Facilities	Occupied	With	% of County Occupied Dwellings
Region 1 - Metropolitan	315,655	313,780	99.4	162,675	51.5
Halton	12,215	11,820	96.8	7,445	60.9
Peel	14,505	14,095	97.2	10,085	69.5
York	288,935	287,865	99.6	145,145	50.2
Region 2 - Burlington	89,915	88,570	98.5	33,885	49.2
Brant	19,845	19,050	96.0		52.0
Wentworth	70,070	69,520	99.2		48.4
Region 3 - Niagara	56,645	55,880	98.6	26,630	47.0
Lincoln	24,300	23,930	98.5	14,095	58.0
Welland	32,345	31,950	98.8	12,535	38.8
Region 4 - Lake Erie	18,520	17,275	93·3	4,605	24.9
Haldimand	6,735	6,090	90·4	1,090	16.2
Norfolk	11,785	11,185	94·9	3,515	29.8
Region 5 - Upper Thames	75,860	73,820	97.3	37,970	50.1
Elgin	15,330	14,865	97.0	7,330	47.8
Middlesex	44,090	42,920	97.3	21,610	49.0
Oxford	16,440	16,035	97.5	9,030	54.9
Region 6 - Border	79,705	78,095	98.0	36,100	45.3
Essex	57,525	56,850	98.8	29,705	51.6
Kent	22,180	21,245	95.8	6,395	28.8
Region 7 - St. Clair Rive	20,610 20,610		<u>93.9</u> 93.9	7,965 7,965	38.6 38.6
Region 8 - Upper Grand Ri	ver 65,105	32,020	95.9	37,360	57.4
Perth	14,740		95.4	9,190	62.3
Waterloo	32,600		98.2	20,265	62.2
Wellington	17,765		91.9	7,905	44.5
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	73,825 11.770 4,230 16,565 13,870 27,390	13,955	88.1 85.7 83.0 84.2 88.2	30,295 3,425 1,390 6,495 5,965 13,020	41.0 29.1 32.9 39.2 43.0 47.5
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	64,935 8,620 23,005 15,985 7,830 9,495	7,585	87.3	32,330 3,540 13,605 8,065 2,945 4,175	
Region 11 - Quinte	46,500	40,670	87.5	21,555	46.4
Frontenac	16,010	14,595	91.2	8,970	56.0
Hastings	19,740	16,920	85.7	9,165	46.4
Lennox and Addington	5,440	4,285	78.8	1,440	26.5
Prince Edward	5,310	4,870	91.7	1,980	37.3

		-Lighting F	acilities-	-Cooking	Facilities-
	Total Occupied Dwellings	No. with Lighting Facilities	of County Occupied Dwellings	With	County Occupied Dwellings
Region 12 - Upper St. Lawr		23.005	0g r	15 1 h C	10.7
Dundas Glengarry Grenville Leeds Stormont	35,445 4,295 4,305 4,845 10,295 11,705	31,025 3,730 3,010 4,175 9,185 10,925	87.5 86.8 69.9 86.2 89.2 93.3	15,145 1,440 595 1,815 4,710 6,585	42.7 33.5 13.8 37.5 45.8 56.3
Region 13 - Ottawa Valley	93,325	85,085	91.2	57,030	61.1
Carleton	58,580	57,140	97.5	47,680	81.4
Lanark	9,675	8,240	85.2	4,055	41.9
Prescott	5,590	4,590	82.1	610	10.9
Renfrew	15,655	12,045	76.9	3,975	25.4
Russell	3,825	3,070	80.3	710	18.6
Region 14 - Highlands	27,650	21,815	78.9	7,235	26.2
Haliburton	2,050	1,535	74.9	340	16.6
Muskoka	6,860	6,030	87.9	1,985	22.9
Nipissing	11,485	9,270	80.7	4,020	35.0
Parry Sound	7,255	4,980	68.6	890	12.3
Region 15 - Clay Belt	32,145	27,355	85.1	11,965	37.2
Cochrane	19,415	16,345	84.2	7,465	38.4
Timiskaming	12,730	11,010	86.5	4,500	35.3
Region 16 - Nickel Range	27,145	23,250	85.7	13,975	51.5
Manitoulin	2,805	1,810	64.5	325	11.6
Sudbury	24,340	21,440	88.1	13,650	56.1
Region 17 - Sault	15,335	13,220	86.2	5,630	<u>36.7</u>
Algoma	15,335	13,220		5,630	36.7
Region 18 - Lakehead	42,805	35,345	82.6	19,980	46.7
Kenora (1)	10,205	6,960	68.2	2,970	29.1
Rainy River	5,740	4,135	72.0	1,595	27.8
Thunder Bay	26,860	24,250	90.3	15,415	57.4
Total	1,181,125	1,111,360	94.1	572,640	48.5

#### (1) Patricia portion included in Kenora

Source: 1951 Census - Housing, Plumbing, Lighting, Cooking and Refrigeration Facilities.

#### ELECTRICITY ON FARMS IN CANADA, 1951

Areas	Number of Farms	Number of Farms Reporting Electric Power(1)	NO. OF REPORTING ELH AS PER (  No. of Farms By Provinces	ECTRIC POWER
Canada(2)	623,091	319,398	51.3	100.0
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan	3,626 10,137 23,515 26,431 134,336 149,920 52,383 112,018	1,383 2,226 16,733 15,938 90,209 110,595 25,208 18,213 20,709	38.1 22.0 71.2 60.3 67.2 73.8 48.1 16.3 24.7	0.4 0.7 5.2 5.0 28.2 34.6 7.9 5.7
Alberta British Columbia	84,315 26,406	18,168	68.8	5.7

(1) One or more sources of power(2) Includes data for Yukon and Northwest Territories

Source: 1951 Census, Agriculture: Farm Machinery and Electric Power

#### NUMBER OF OCCUPIED DWELLINGS WITH ELECTRIC LIGHTING AND COOKING FACILITIES IN ONTARIO, 1951

	Total Occupied Dwellings	Number With Electric Lighting Facilities D	Occupied	Number With Electric Range	% of Occupied Dwellings
Ontario	1,181,125	1,111,360	94.1	572,640	48.5
Rural Farm Non-farm	340,870 166,955 173,915	273,790 127,225 146,565	80.3 76.2 84.3	113,800 48,145 65,655	33.4 28.8 37.8
Urban 100,000 and over 30,000 - 99,999 10,000 - 29,999 under 10,000	840,255 319,590 201,630 123,375 195,660	837,570 319,295 201,220 123,005 194,050	99.7 99.9 99.8 99.7 99.2	458,840 154,905 128,260 75,910 99,765	54.6 48.5 63.6 61.5 51.0
Canada	3,409,295	2,967,035	87.0	975,655	28.6

Source: 1951 Census, Housing: Plumbing, Lighting, Cooking, and Refrigeration Facilities.

NOTE: A dwelling is defined as a structurally separate set of living premises with private entrance from outside the building, or from a common hallway or stairway inside.

Figures are estimates derived from a 20% sample of all dwellings in the 10 provinces, thus subject to sampling error.

#### ELECTRIC POWER ON FARMS IN ONTARIO, 1951

	Number of Farms	No. of Farms Reporting (1) Electric Power	as Per	Electric Power Cent of Total Farms with Electric Power
Region 1 - Metropolitan	8,577	7,432	86.7	6.7
Halton	2,035	1,780	87.5	1.6
Peel	2,311	1,986	85.9	1.8
York	4,231	3,666	86.6	3.3
Region 2 - Burlington	5,131	4,463	87.0	4.0
Brant	2,236	1,884	84.2	1.7
Wentworth	2,895	2,579	89.1	2.3
Region 3 - Niagara	5,538	5,099	92.1	4.6
Lincoln	3,503	3,257	93.0	2.9
Welland	2,035	1,842	90.5	1.7
Region 4 - Lake Erie	6,027	5,276	87.5	4.8
Haldimand	2,370	1,927	81.3	1.8
Norfolk	3,657	3,349	91.6	3.0
Region 5 - Upper Thames	13,314	11,736	88.1	10.7
Elgin	3,526	3,072	87.1	2.8
Middlesex	5,777	4,928	85.3	4.5
Oxford	4,011	3,736	93.1	3.4
Region 6 - Border	10,629	9,459	89.0	8.5
Essex	5,316	4,787	90.0	4.3
Kent	5,313	4,672	87.9	4.2
Region 7 - St. Clair River	4,646	3,848	82.8	3·5
Lambton	4,646	3,848	82.8	3·5
Region 8 - Upper Grand Riv	rer 11,458	8,967	78.3	8.1
Perth -	4,357	3,598	82.6	3.2
Waterloo	2,638	2,160	81.9	2.0
Wellington	4,463	3,209	71.9	2.9
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	2 <sup>1</sup> 4,528	17,339	70.7	15.7
	4,682	3,331	71.1	3.0
	2;132	1,507	70.7	1.4
	6,153	3,945	64.1	3.6
	5,772	4,244	73.5	3.8
	5,789	4,312	74.5	3.9
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	12,716 2,283 3,315 2,043 2,314 2,761	9,314 1,654 2,633 1,287 1,574 2,166	73.2 72.4 79.4 63.0 68.0 78.4	8.5 1.5 2.4 1.2 1.4
Region ll - Quinte Frontenac Hastings Lennox and Addington Prince Edward	9,536 2,262 3,600 2,058 1,616	6,477 1,514 2,068 1,486 1,409	67.9 66.9 57.4 72.2 87.2	5.9 1.4 1.9 1.3
Region 12 - Upper St. Lawre	nce 9,581	6,729	70.2	6.1
Dundas	1,881	1,431	76.1	1.3
Glengarry	1,913	1,093	57.1	1.0
Grenville	1,499	1,029	68.6	0.9
Leeds	2,380	1,807	75.9	1.6
Stormont	1,908	1,369	71.7	1.3

Farms with Electric Power ----as Per Cent of-----Total Farms No. of Farms Number of Reporting (1) Number of with Electric Electric Power Farms Farms Power 12,795 Region 13 - Ottawa Valley 7,209 2,085 Carleton 1.9 Lanark 2,170 1,146 52.8 1.0 Prescott 2,176 1,265 58.1 1.1 Renfrew 3,575 1,498 41.9 1.4 1,770 Russell 1,215 68.6 1.1 3,949 350 655 1,940 179 471 <u>49.1</u> 51.1 Region 14 - Highlands Haliburton Muskoka 71.9 Nipissing 581 1,403 41.4 Parry Sound 1,541 46.0 1,364 700 Region 15 - Clay Belt 3,787 2,198  $\frac{36.0}{31.8}$ Cochrane Timiskaming 1,589 664 41.8 Region 16 - Nickel Range 1,254 48.4 Manitoulin 63.0 Sudbury 39.9 Region 17 - Sault Algoma 3,785 551 1,371 Region 18 - Lakehead Kenora (2) 41.7 Rainy River 473 34.5 0.4 Thunder Bay 1,863 66.1 1.1

Total

Source: 1951 Census, Agriculture - Farm Machinery and Electric Power.

149,920

<sup>(1)</sup> One or more sources of power.

<sup>(2)</sup> Patricia portion included in Kenora.

# THE ONTARIO HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO TO MUNICIPALITIES, RURAL OPERATING AREAS, AND DIRECT INDUSTRIAL CUSTOMERS ONTARIO 1939 and 1952

	1939	1952 kwh.	% increase 1952/1939
	<u>kwh.</u>	<u>V.M.II •</u>	1972/1939
Region 1 - Metropolitan Primary			
Municipalities	1,398,820,142	3,557,354,880	154.3
Rural Operating Areas Direct Industrial Customers	19,432,306 25,960,130	119,480,751 92,294,756	514.9 255.5
TOTAL	1,444,212,578	3,769,130,387	161.0
Secondary			- 11
TOTAL PRIMARY & SECONDARY	1,444,212,578	3,769,130,387	161.0
Region 2 - Burlington			
Primary Municipalities	508,900,648	1,271,237,092	149.8
Rural Operating Areas Direct Industrial Customers	19,480,083 35,649,229	107,121,369 196,334,630	449.9 450.7
	564,029,960	1,574,693,091	179.2
TOTAL Secondary	764,029,960		
TOTAL PRIMARY & SECONDARY	564,029,960	1,574,693,091	179.2
Region 3 - Niagara			
Primary Municipalities	163,246,560	472,782,939	189.6
Rural Operating Areas Direct Industrial Customers	18,904,678 1,186,605,931	90,945,270 2,668,549,731	381.1 124.9
	1,368,757,169	3,232,277,940	136.1
TOTAL Secondary	505,412,525	2,081,000	-99.6
TOTAL PRIMARY & SECONDARY	1,874,169,694	3,234,358,940	72.6
Region 4 - Lake Erie Primary			
Municipalities	19,622,177	49,779,938 40,561,380	153.7 523.7
Rural Operating Areas Direct Industrial Customers	6,502,959 6,024,920	15,685,010	160.3
TOTAL	32,150,056	106,026,328	229.8
Secondary			
TOTAL PRIMARY & SECONDARY	32,150,056	106,026,328	229.8
Region 5 - Upper Thames Primary			
Municipalities Rural Operating Areas	224,795,675 28,109,154	456,505,553 147,691,245	103.1 425.4
Direct Industrial Customers	1,958,105	6,945,896	254.7
TOTAL	254,862,934	611,142,694	139.8
Secondary			
TOTAL PRIMARY & SECONDARY	254,862,934	611,142,694	139.8

	1939 kwh.	1952 <u>kwh.</u>	% increase 1952/1939
Region 6 - Border			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	182,120,610 22,008,051 39,755,859	485,960,985 118,621,816 72,196,597	166.8 439.3 <u>81.6</u>
TOTAL Secondary	243,884,520	676,779,398	177.5
TOTAL PRIMARY & SECONDARY	243,884,520	676,779,398	177.5
Region 7 - St. Clair River Primary			
Municipalities Rural Operating Areas Direct Industrial Customers	48,454,160 5,797,923	137,758,476 34,581,064 208,155,580	184.3
TOTAL Secondary	54,252,083	380,495,120	601.3
TOTAL PRIMARY & SECONDARY	54,252,083	380,495,120	601.3
Region 8 - Upper Grand River Primary			
Municipalities Rural Operating Areas Direct Industrial Customers	218,465,781 17,320,136 20,504,028	539,771,760 91,776,152 30,449,600	147.1 429.9 48.5
TOTAL Secondary	256,289,945	661,997,512	158.3
TOTAL PRIMARY & SECONDARY	256,289,945	661,997,512	158.3
Region 9 - Blue Water Primary			
Municipalities Rural Operating Areas Direct Industrial Customers	82,149,043 11,558,212 2,874,965	255,048,347 135,388,592 32,587,987	210.5 1,071.4 1,033.5
TOTAL Secondary	96,582,220	423,024,926	338.0
TOTAL PRIMARY & SECONDARY	96,582,220	423,024,926	338.0
Region 10 - Kawartha			
Primary  Municipalities  Rural Operating Areas  Direct Industrial Customers	113,610,410 11,338,678 9,728,632	406,212,698 78,756,907 23,755,438	257.5 594.6 144.2
TOTAL Secondary	134,677,720	508,725,043	277.7
TOTAL PRIMARY & SECONDARY	134,677,720	508,725,043	277.7
Region 11 - Quinte			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	78,227,648 7,293,215 30,316,918	252,548,810 63,991,242 238,893,489	222.8 777.4 688.0
TOTAL	115,837,781	555,433,541	379.5
Secondary  TOTAL PRIMARY & SECONDARY	115,837,781	555,433,541	379.5

	1939 <u>kwh</u> .	1952 kwh.	% increase 1952/1939
Region 12 - Upper St. Lawrence			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	21,138,315 7,623,407 57,176,568	78,806,534 46,328,980 186,108,681	272.8 507.7 225.5
TOTAL Secondary	85,938,290 147,113,900	311,244,195 16,188,300	262.2 -89.0
TOTAL PRIMARY & SECONDARY	233,052,190	327,432,495	40.5
Region 13 - Ottawa Valley			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	117,880,270 4,906,385 806,550	385,033,834 67,783,200 103,157,309	226.6 1,281.5 12,689.9
TOTAL Secondary	123,593,205	555,974,343	349.8
TOTAL PRIMARY & SECONDARY	123,593,205	555,974,343	349.8
Regfon 14 - Highlands Primary Municipalities Rural Operating Areas Direct Industrial Customers	23,890,797 3,570,388 	74,595,370 45,944,950 14,124,063	212.2 1,186.8
TOTAL Secondary	27,461,185	134,664,383	390.4
TOTAL PRIMARY & SECONDARY	27,461,185	139,261,618	407.1
Region 15 - Clay Belt *			
Primary Municipalities Rural Operating Areas	52,456,266 -	96,366,260 14,484,583	83.7
Direct Industrial Customers	473,636,006	553,124,281	16.8
TOTAL Secondary	526,092,272 169,385,800	663,975,124	26.2 <u>-38.9</u>
TOTAL PRIMARY & SECONDARY	695,478,072	767,504,464	10.4
Region 16 - Nickel Range			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	24,524,568 1,351,700 <u>3</u> 18,265,069	92,527,870 32,540,921 701,769,127	277.3 2,307.4 120.5
TOTAL Secondary	344,141,337	826,837,918	140.3
TOTAL PRIMARY & SECONDARY	344,141,337	826,837,918	140.3
Region 17 - Sault	(No H.E.P.C. Cust		egion)

<sup>\*</sup> Commencing January 1, 1945, H.E.P.C. purchased and took over the operation of the former Northern Ontario Power Company. In the year 1939, certain loads are estimated due to information not being available.

	1939 <u>kwl</u>	1952 <u>kwh</u> .	% increase 1952/1939
Region 18 - Lakehead ** Primary			
Municipalities Rural Operating Areas Direct Industrial Customers	249,015,076 1,166,195 214,971,350	337,261,601 19,791,741 937,386,410	35.4 1,597.1 336.1
TOTAL Secondary	465,152,621 195,345,112	1,294,439,752 242,551,321	178.3 24.2
TOTAL PRIMARY & SECONDARY	660,497,733	1,536,991,073	132.7
Region 19 - James Bay Primary			
Municipalities Rural Operating Areas	301,197	2,748,120	812.4
Direct Industrial Customers	52,382,006	83,813,284	60.0
TOTAL Secondary	52,683,203 —-	86,561,404 16,987,065	64.3
TOTAL PRIMARY & SECONDARY	52,683,203	103,548,469	96.5
SUMMARY ALL REGIONS			
Primary Municipalities Rural Operating Areas Direct Industrial Customers	3,527,619,343 186,363,470 2,476,616,266	8,952,301,067 1,255,790,163 6,165,331,869	193.8 573.8 148.9
TOTAL Secondary	6,190,599,079 1,017,257,337	16,373,423,099 385,934,261	164.5 -62.1
TOTAL PRIMARY & SECONDARY	7,207,856,416	16,759,357,360	132.5

<sup>\*\*</sup> During the year 1949, H.E.P.C. purchased the physical assets of the Kaministiquia Power Company Limited at Fort William and vicinity. The figures shown above for 1939 include power supplied to the Company's customers in that year.

#### MANUFACTURING

Manufacturing is the most important economic activity in the Province but it is only in recent years that it has achieved this distinction. Between the years 1931 and 1941 the proportion of the labour force in manufacturing and mechanical occupations rose from 16.7 per cent. to 22.1 per cent., while the proportion in agriculture declined from 22.7 per cent. to 18.6 per cent. By 1951, the proportion in manufacturing and mechanical occupations rose to 23.2 per cent. and the agricultural category dropped to 10.8 per cent. The former does not include clerical staff, however, and when these are added, the proportion is 33.0 per cent. or roughly one-third of the Ontario labour force.

#### MANUFACTURING INDUSTRIES IN ONTARIO

Year	Establishments	Employees 1000	Salaries & Wages \$'000,000	Gross Value of Production \$ 000,000	G.V.P. in Constant" Dollars (1935-39) \$'000,000
1920	9,113	295.7	362.9	1,864	895
1929	9,348	328.5	406.6	2,020	1,633
1939	9,824	318.9	378.4	1,746	1,713
1946	11,424	498.1	845.2	3,755	2,721
1949	12,951	557.2	1,305.5	6,104	3,064
1950	12,809	566.5	1,413.0	6,823	3,234
1951	13,025	599.4	1,669.4	8,075	3,331
1952 (	1) 13,200	600.5	1,835.2	8,398	3,640
1953 (	1) 13,400	632.0	2,027.0	8,867	3,870

#### (1) Estimates

Ontario factories have manufactured approximately half of the goods produced in Canada during the last seventy years. As early as 1880 the gross value of Ontario's manufactured products was 51 per cent. of the Canadian total. In 1917 the percentage was 52, in 1945, 48, and in 1953, 49. The present trend of new investment in manufacturing suggests that a slight increase in Ontario's share may be anticipated in the near future.

# ESTIMATED NEW INVESTMENT IN MANUFACTURING (Millions of Dollars)

Year	Ontario	Canada
1946 1949 1950 1951(1) 1952(1)	173 240 239 395 493 491	337 536 519 793 973 940

(1) preliminary

Source: Department of Trade and Commerce, Ottawa.

The size and diversity of Ontario's manufacturing industries have been the result of a number of factors. The concentration of three-fifths of Canada's population in the St. Lawrence lowlands has been of primary importance, providing a market for the products and a labour force for their manufacture. Combined with this concentration of population is a network of both rail lines and highways which facilitates the transportation of raw materials and distribution of manufactured goods throughout the area.

Although Ontario has no coal mines, little petroleum and, until recently, no large scale iron ore mines, the extensive programme of hydro-electricity development and proximity to the United States coal and iron ore fields have tended to offset these disadvantages. Iron ore, shipped by lake freighter from the Minnesota mines, has in large measure supplied Ontario's primary iron and steel industry which produces 81 per cent. of the nation's pig iron. The development of the primary industry has led to the establishment of a variety of industries

dependent on primary iron or steel.

The agricultural, forest, and mineral wealth provides the raw materials for a number of Ontario industries. The food and beverage industry is largely dependent on Ontario farm produce including dairy products, meat, leather, canning crops, grains and tobacco. The pulp and paper industry depends on the stands of coniferous timber in the northern regions and the non-ferrous metal products industry uses numerous metals found in the precambrian shield.

The proximity of southern Ontario to the industrial Great Lakes area of the United States has influenced the location of industries in the Province. The Regions bordering western Lake Ontario, including Toronto, Hamilton and Oshawa, rank first in terms of the gross value of manufacturing production with 48 per cent. (1950). The Regions bordering the international rivers (Niagara, Detroit, St. Clair, and St. Marys), which offer convenient access to and from the United States, rank second with 23 per cent.

The inland centres in the Upper Thames River and Upper Grand River Regions account for approximately 10 per cent. of the total production.

# NEW MANUFACTURING ESTABLISHMENTS IN ONTARIO BY REGIONS

Region	1952	1953	Region	1952	1953
Metropolitan Burlington Niagara Lake Erie Upper Thames River Border St. Clair River Upper Grand River	43 12 7 2 7 16 1	64 9 4 - 8 13 1 8	Quinte Upper St. Lawrence River Ottawa Valley Highlands Clay Belt Nickel Range Sault Lakehead	4 2 4 3 1	9 2 5 1 - 1 - 1
Blue Water Kawartha	6 3	5 <b>5</b>	TOTAL	126	136

Source: Ontario Department of Planning and Development.

The importance of the manufacturing industries of Ontario in the Canadian economy is clear from the statistics quoted above, but mention should be made of the contribution manufacturing industries make to the total personal income received in Ontario. Unfortunately, it is not possible to determine the exact contribution from the available data, but manufacturing payrolls, estimated at \$1,835 million in 1952, were 40 per cent. of the estimated total wages and supplementary income and 27 per cent. of the total personal income received in the Province. This does not include income received in the form of interest, dividends and profits of manufacturing establishments but it serves to illustrate the importance of manufacturing as a source of personal income.

#### EMPLOYMENT IN SELECTED MANUFACTURING INDUSTRIES

		(1)	(1)		(1)	
		Index	Index	Estimates	Index	Estimates
Industry	1951	1951	1952	1952	1953	1953
				1000		1000
Foods and Beverages	69,531	1016	103.0	70.5	103.3	70.7
Rubber Products	15.825	107.4	101.2	14.9	107.4	15.8
Leather Products	13,378	,	90.8	12.7	97.2	13.6
Textiles	30,107	101.7	93.7	27.7	94.5	28.0
Clothing	38,800	98.1	92.8	36.7	97.1	38.4
Wood Products	36,657	106.7	101.3	34.8	104.0	35.7
Paper Products	32,445	106.7	107.9	32.8	109.6	33.3 "
Printing and Publishing	32,969	107.7	105.7	32.4	107.9	33.0
Iron and Steel	117,135	109.2	109.0	116.9	109.0	116.9
Transportation Equipment	70,188	119.8	135.3	79.3	154.4	90.5
Non-Ferrous Metal Products	27,692	110.5	110.2	27.6	119.5	29.9
Electrical Supplies	47,681	121.4	120.5	47.3	137.4	54.0
Non-Metallic Mineral Products	16,510	111.0	105.6	15.7	111.8	16.6
Chemical Products	22,762	109.9	113.0	23.4	116.4	24.1

#### PAYROLLS IN SELECTED MANUFACTURING INDUSTRIES

		(1)	(1)		(1)	
		Index	Index	Estimates	Index	Estimates
Industry	1951	1951	1952	1952	1953	1953
	\$'000			\$'000,000		\$'000,000
Foods and Beverages	165,908	118.2	130.3	182.9	137.4	192.8
Rubber Products	46,833	128.5	128.9	46.9	147.4	53.7
Leather Products	28,367	105.5	110.8	29.8	123.2	33.2
Textiles	71,445	115.2	116.5	83.4	122.6	72.2
Clothing	80,496	109.3	111.2	81.9	122.1	89.9
Wood Products	79,857	123.3	128.9	83.5	138.9	90.0
Paper Products	106,324	129.6	137.7	112.9	145.9	119.7
Printing and Publishing	91,256	125.2	134.2	97.9	147.4	107.5
Iron and Steel	362,391	127.8	139.9	396.7	146.6	415.7
Transportation Equipment	225,573	141.8	175.2	278.7	209.8	333.8
Non-Ferrous Metal Products	82,907	127.7	138.1	89.7	159.4	103.5
Electrical Supplies	138,733	141.4	155.0	152.0	182.8	179.3
Non-Metallic Mineral Products	47,742	125.2	130.5	49.7	152.1	57.9
Chemical Products	67,420	129.6	144.9	75.4	155.4	80.8

(1) Base: 1949=100

Source of Original Data: Dominion Bureau of Statistics, Ottawa.

EMPLOYEES IN MANUFACTURING INDUSTRIES BY REGIONS

Region	Employees 1950	Index 1950 (1949=100)	Index 1951 (1 <u>9</u> 49=100)	Estimates 1951 1000	Index 1952 (1949=100)	Estimates 1952 1000	Index 1953 (1949=100)	Estimates 1.953
1 - Metropolitan 2 - Burlington 3 - Niagara 4 - Lake Erie 5 - Upper Thames River 6 - Border 7 - St. Clair River 9 - Blue Water 10 - Kawartha 11 - Quinte 12 - Upper St. Lawrence River 13 - Ottawa Valley 14 - Highlands 15 - Clay Belt 16 - Nickel Range 17 - Sault 18 - Lakehead ONTARIO	201,842 36,688 36,686 46,333 1,606 46,877 10,888 14,377 123,51	00000000000000000000000000000000000000	1100.0 112.0 1007.1 1008.1 1008.1 1007.9 1007.9 106.7 106.7 106.7 108.9	214.5 7.85.2 3.66.2 5.99.3 1.59.3 1.15.8 1.15.8 1.16.3	1111.1 105.6 106.7 106.7 106.7 106.7 106.5 106.5 106.9 107.3 113.8 123.3 123.3	00 00 00 00 00 00 00 00 00 00	120.0 105.1 101.8 101.8 101.8 108.7 108.5 108.1 100.0 110.0 110.0 123.8 123.2 100.0 110.0	63 + 65 + 65 + 65 + 65 + 65 + 65 + 65 +

(1) This is a census figure. Subsequent estimates are based on the 1951 figure. Source of Original data: Dominion Bureau of Statistics, Ottawa.

MANUFACTURING PAYROLLS BY REGIONS

Estimates 1953 \$1000,000	26.50 1785.0 1785.0 1785.0 1785.0 1785.0 1786.0 178
Index 1953 (1949=100)	1396. 1396. 1396. 1396. 1396. 1397.
Estimates 1952 \$ 1000,000	664.3 145.5 145.5 138.0 115.9 36.8 36.8 36.8 37.9 10.9 10.9 11.7
Index 1952 (1949=100)	14
Estimates 1951 \$ 1000,000	294.5 129.8 129.8 170.0
Index 1951 (1949=100)	129.5 136.3 13.9 13.9 128.3 128.3 128.2 128.2 136.6 137.6 137.6
Index 1950 (1949-100)	109.1 104.9 106.5 98.8 1111.3 1111.8 1111.8 119.9 119.9 106.9 106.9 106.9 106.8
1950	500,872 187,530 101,437 7,100 61,343 133,289 23,033 97,529 28,823 97,529 28,823 1,7278 1,594 25,599 22,202 28,689 1,412,999
Region	1 - Metropolitan 2 - Burlington 3 - Niagara 4 - Lake Erie 5 - Upper Thames River 6 - Border 7 - St. Clair River 8 - Upper Grand River 9 - The Blue Water 10 - Kawartha 11 - Quinte 12 - Upper St. Lawrence River 13 - Ottawa Valley 14 - Highlands 15 - Clay Belt 16 - Nickel Range 17 - Sault 18 - Lakehead 11,4,4

Subsequent estimates are based on the 1951 figure. (1) This is a census figure.

Source of original data: Dominion Bureau of Statistics, Ottawa.

5.1

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF ONTARIO

		Average Weekly Barnings \$ 5 65.72 65.12 65.19 65.19 65.19 65.19 65.19 65.10 65.10 65.10 65.10 65.10 65.11 65.11	61.83 67.75 67.75 66.33 66.94 66.94 66.94
	REGION	Pay. 1937. 1937. 1947. 1957. 1	142.6 156.2 156.2 159.1 150.7 150.7 150.7 150.7 150.8 150.8
	NIAGARA REGION	Employ- ment 110.6 111.9 113.3 116.3 116.3 116.2 116.8 127.8 119.9	113.9 115.3 115.9 116.2 116.8 116.8 116.8 118.5 113.9
	9	Date 1952 Jan.11 Feb.1 Mar. 1 May 1 June	Jan. 1 Feb. 1 Mar. 1 Apr. 1 May 1 June 1 July 1 Aug. 1 Sept. 1 Oct. 1 Nov. 1 Dec. 1
		Average Weekly Weekly \$ 56.78 60.86 61.97 61.92 60.77 61.92 62.84 65.08 65.08 65.09 65.00	66884686864666666666666666666666666666
00	REGION	Pay- rolls 122.6 131.6 135.6 135.6 135.9 136.9 136.9 138.2 142.4 142.4	1388.17.00.00.00.00.00.00.00.00.00.00.00.00.00
1949 = 100	BURLINGTON REGION	Employ- ment 102.8 104.0 105.8 105.7 106.7 106.7 106.7 106.7 106.7	106.9 106.9 106.9 106.9 105.5 105.3 105.3 104.9 104.9
	CU	Date Jan. 1 Feb. 1 Mar. 1 Apr. 1 Apr. 1 Apr. 1 Apr. 1 Apr. 1 Nay 1 July 1 Got. 1 Nov. 1 Dec. 1	Jan. 1 Feb. 1 Mar. 1 Apr. 1 May 1 June 1 July 1 Aug 1 Sept. 1 Oct. 1 Nov. 1 Dec. 1
		Average Weekly Barnings \$ 53.48 57.40 58.62 58.75 58.26 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36 58.36	57.30 62.53 62.16 62.16 62.16 62.54 63.55 63.56 63.56
	AN REGION	Pay- rolls 126.1 136.0 138.5 140.4 141.6 144.9 144.9 144.9 160.4	148.6 163.3 164.0 165.3 166.9 170.6 175.0 175.0
	METROPOLITAN	Employ- ment 106.3 106.7 107.5 108.7 109.4 112.3 111.8 113.4 115.1 116.6	116.4 118.1 118.1 118.9 118.9 119.0 122.0 122.0 123.7
		Date 1952 Jan. 1 Feb. 1 Mar. 1 Mar. 1 May 1 June 1 July 1 Aug. 1 Sept. 1 Oct. 1 Nov. 1 Dec. 1	1953 Jan. 1 Feb. 1 Mar. 1 Apr. 1 May 1 July 1 Aug. 1 Sept. 1 Oct. 1 Nov. 1 1953 Average

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF OWNARIO

		Average	Earnings	58.62	64.11	63.59	68,87	64.79	56.40	62.65	64.81	64.10	63.49	63,21	68,56	63.83		59,10	67.50	70.18	71.73	71.20	70.52	69.59	68.79	65.34	67.08	68.15	70.47	68,30
	TECTON	Pay	rolls	112.3	120.9	127.2	142.3	141.7	110.3	138.8	136.8	137.3	141.4	132.3	148.3	132.5		125.6	142.6	152.9	158.4	157.7	155.8	156.7	150.7	140.4	146.6	138.5	142.9	747.4
	BORDER REGION	Employ-	ment	4.86	6.96	102.8	106.1	107.6	100.1	113.2	108.0	108.9	113.0	106.1	110.6	106.0		107.8	106.9	7.011	112.6	112.6	112.3	114.5	177.4	109.2	111.1	103.3	103.1	109.6
	9		Date 1952	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	J. t. J	Nov. 1	Dec. 1	1952 Average	1053	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
		Average Weekly	Earnings \$	48.39	51.43	52.27	52.68	53.76	53.94	54.84	53.44	53.65	54°68	55.06	530	53.31		52.98	55.68.	55.48	56.02	56.64	56.87	56.57	56.26	55.51	56.28	56.49	55.65	55.87
0	S REGION	Pay-	rolls	119.5	126.9	128.6	130.6	133.5	137.3	142.8	138.8	141.5	143.6	147.9	246.0	136.5		140.8	150.5	152,2	155.4	156.1	160.2	161.8	155.8	154.9	153.7	156.1	152.3	154.2
1949 = 100	UPPER THAMES REGION	Employ-	ment	102.0	101.9	101.6	102.5	102.6	105.1	107.3	107.3	109.0	108.5	111.0	109.1	105.7		110.1	111.9	113.3	114.6	113.8	116.3	118.0	174.4	115.2	112.7	114.1	113.0	114.0
	2.		Date 1952	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
		Average Weekly	Earnings \$	41.87	47.57	46.92	7,6,26	45.90	47.54	47.74	49.26	52.18	53.21	48.18	49.26	47.99		44.16	46.87	47.54	47.72	48.79	49.09	50.15	49.45	53.83	54.83	48.82	49.41	49.22
	REGION	Pay-	rolls	95.1	115.4	108.0	106.7	106.7	111.5	121.3	123.6	160.2	157.9	133.8	135.4	123.0		117.9	132.7	130.1	131.2	124.1	124.0	131.9	133.6	158.8	164.0	136.0	121.1	133.8
	LAKE ERIE REGI	Employ-	ment	85.2	51.1	86.4	86.6	87.3	88.0	95.3	94.3	115.4	111.6	104.3	101,3	92.6		98.8	104.7	102.9	103.4	92.6	6-76	0.66	101.6	110,9	112.4	104.7	92.1	101.8
	4		Date 1952	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan.	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF OWNARIO

	Average Weekly Rarnings	<del>0</del> 0	44.82	45.20	46.45	46.58	74.04	TO*).t	46.07	47.40	48.65	48.26	46.86	46.18		43.44	746.60	47.91	48.14	4x 31	48.17	48.29	47.57	47.27	±α°Ω+.	49.09	4.0.53	47.76
REGION	Pay-	0 1/11	125.3	125.7	129.0	129.8	131.0	130.4	132.2	138.6	142.6	136.9	131.6	131.2		122.5	132.8	138.3	139.5	138.9	140.4	142.8	142.1	140.8	148.0	150.9	148.5	140.5
BLUE WATER REGION	Employ- ment		99.99	4.66	89.3	4.66	100.4	103.2	102.0	104.0	104.2	100.9	8.66	101.2		100.3	101.3	102.6	103.0	102.2	103.5	104.9	1001	105.9	107.7	109.2	106.5	104.4
9.	ď	1952	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
N	Average Weekly	8	70,16	51.07	51.75	51.55	51.72	51.51	51.76	52.65	53.53	53.91	54.07	51.65		50.12	54°34	54.80	54.87	54.72	54.88	54.81	53.81	54.36	55.30	55.45	54.97	54.37
GRAND RIVER REGION	Pay-	000	115.0	117.9	119.8	120.2	121.2	122.3	123.0	126.9	132.2	136.3	137.5	122.8		126.2	137.2	137.6	138.6	137.4	138.0	138.3	134.6	138.6	145.0	141.8	138.8	137.4
	Employ-	o co	77.00	93.7	0.45	9.75	95.1	96.3	4.96	97.8	100.2	102.6	103.2	5.96		102.1	102.4	102.3	102.6	101.7	101.9	102.3	101.3	103.3	104.1	103.6	102.3	102.5
8. UPPER	0 +	1952	Teh. T	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1.	Dec. 1	1953 Average
80	Average Weekly															67.16	70.96	70.82	71.41	74.23	72.63	72.72	73.51	74.45	75.71	77.46	76.18	73.10
IVER REGION	Pay-	STIOL	7.04T	151.5	153.7	159.4	162.9	166.0	158.4	156.1	162.4	159.1	161.4	156.9		154.8	1,091	160.4	162.9	170.2	167.3	169.5	172.6	170.2	171.5	174.0	171.8	167.1
ST. CLAIR RIVER	Employ-	ment	7.00.	100.7	110.4	112.3	113.8	119.6	118.3	111.8	116.1	112.5	113.3	113.0		112.4	110.4	111.3	111.8	113.0	174.1	116.8	117.8	6. 477	113.7	112.7	113.1	113.5
T. ST	4	<u>1952</u>	Jan. I	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF ONTARIO

	NO	Average Weekly	Earnings	40.01	51.65	52.60	51.78	51.83	50.87	52.32	52.09	53.67	53.09	54.72	54.09	52.30		(	48.80	54.76	55.29	53.57	54.39	55.08	54.85	54.08	54.78	55.81	55.48	55.08	54.33
	LAWRENCE REGION	Pay-	rolls	0.191	125.0	126.4	120.7	119.5	119.4	123.5	123.0	128.0	128.6	132.5	133.0	125.1		,	116.9	131.9	135.6	132.0	135.9	137.8	137.7	136.2	141.8	145.0	145.4	145.2	136.8
	ST.	Employ-	ment	4-401	102.2	101.5	98.4	4.76	99.1	7.66	7.66	100.7	102.2	102.2	103.2	100.9			100.9	101.5	103.5	104.1	105.5	105.8	106.1	106.4	109.3	109.7	110.7	111.3	106.2
	12. UPPER		Date	1952 Jan -	Heb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug.11	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	() () ()	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
		Average Weekly	1															,	52.65	55.23	55.89	55.94	55.64	55.58	54.03	54.57	53.78	53.88	56.18	56.41	54.98
2	EGION	Pay-	rolls	104.3	133.8	134.5	136.5	136.0	138.3	7.441	148.9	152.8	1.59.4	150.6	151.4	142.6			142.6	149.9	150.2	149.0	151.1	152.6	159.8	158.8	158.7	165.3	156.1	149.5	153.6
77.7	QUINTE REGION	Employ-	ment	100.3	103.4	103.2	103.2	103.4	104.3	113.0	113.3	118.6	124.0	112.0	112.0	109.2			107.3	107.6	106.5	105.7	107.8	108,4	116.7	114.9	9.911	121.2	109.8	104.7	110.6
	11.		igs Date	1952 Jan J	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	6 1 4	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
		Average Weekly	Earnings		61.10	60.09	60.75	61.38	62.02	62.81	60.78	62.83	63.25	63.05	59.64	67.29			55.59	65.13	65.83	65.31	64.13	64.27	64.89	62.60	61.89	63.41	63.24	62,13	63.20
	REGION	Pay-	rolls	134.3	141.4	140.3	142.3	145.1	147.9	154.2	149.3	158.5	165.9	160.2	151.2	149.2			135.3	168.0	175.2	174.1	172.2	171.2	173.1	166.2	1.451	168.2	161.1	137.1	163.9
	KAWARTHA REGION	Employ-	ment	370.8	110.5	111.5	111.8	112,8	113.8	117.2	117.3	120.4	125.3	121.3	120.5	116.1		,	116.1	123.0	126.4	126.7	127.7	126.6	126.8	126.2	126.5	126.1	121.1	104.9	123.2
	10.		Date	1952 [ .Tan.	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	( <u>1</u>	1953	Jan, 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF ONTARIO

Davi				Devi
		Date m		Date
4 1.901 9.06		d	Jan. 1	48,44 Jan. 1
113.4			Feb. 1	50.03 Feb. 1
115.7	01		Mar. 1	50.80 Mar. 1
116.1	0	7	Apr. 1	51.27 Apr. 1
119.7	10		May 1	50.66 May 1
137.8	크	7	June 1	50.78 June 1
138.6			July 1	51.26 July 1
8.641	12	7	Aug. 1	51.21 Aug. 1
154.8	12		Sept.1	50.57 Sept.1
155.4	22	7	Oct. 1	51.37 Oct. 1
1.54.4	777	7	Nov. 1	51.94 Nov. 1
132.3	10	-	Dec. 1	53.36 Dec. 1
1,32,8	10,	Average	1952 Average	50.97 1952 Average
		1953	1953	1953
1.22.7	0)	-	Jan. 1	50.57 Jan. 1
134.0	0	7	Feb. 1	54.03 Feb. 1
134.5	6	-	Mar. 1	53.40 Mar. 1
137.0	201	7	Apr. 1	53.55 Apr. 1
7.467	27		May 1	53.80 May 1
159.8	12(		June 1	53.70 June 1
162.0	122	-	July 1	54.03 July 1
764.0	22		Aug. 1	54.03 Aug. 1
162.5	12		Sept.1	54.46 Sept.1
155.8	H	H	Oct. 1	55.08 Oct. 1
145.8	50	_	Nov. 1	55.38 Nov. 1
3.4 138.5 56.63	5		Dec. 1	55.52 Dec. 1
	11	1953 Average 11	Average	1953 Average

INDICES OF EMPLOYMENT IN THE MANUFACTURING INDUSTRIES OF ONTARIO

	Average Weekly Earnings	64.48	66.11	66.20	64.30	65.08	67.49	65.23	65.93	65.88	66.62	67.24	65.60		66.13	68.36	69.07	68.49	68.66	62.69	68.71	67.61	67.79	67.17	68.70	70.77	44.89
REGION	Pay-	142.2	152.3	150.8	148.6	155.5	158.4	164.8	154.2	160.4	157.9	150.7	153.8		147.4	151.6	157.5	157.4	155.1	167.5	169.5	170.3	170.0	165.6	165.4	159.3	161.4
LAKEHEAD REGION	Employ- ment	116.5	121.7	120.3	122.1	126.2	130.1	133.4	123.6	128.6	125.2	118.8	123.9		117.8	117.2	120.5	121.4	119.6	127.1	130.7	133.3	132.6	130.3	127.2	119.0	124.7
18.	Date 1950	Jan. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan, 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
	Average Weekly Earnings	63.72	66.59	92.99	67.85	67.91	65.31	66.02	65.11	67.20	67.39	68.02	99.99		70.57	70.66	71.70	た. と	65.78	26.69	69.02	68.46	69.99	67.62	68.32	68,14	47.89
EGION	Pay-	138.2	145.4	148.6	156.5	161.7	156.7	155.3	153.8	158.6	158.6	154.6	153.0		153.1	151.2	157.1	156.1	158.7	179.3	178.6	185.8	179.9	174.5	168.5	157.9	166.7
. SAULT REGION	Employ- ment	116.3	117.2	120.3	123.8	127.7	128.8	126.2	127.1	127.0	126.8	122.3	1.23.3		115.2	113.8	116.8	122.7	128,3	136.4	137.8	144.3	143.5	137.2	131.1	123.2	129.2
17	Da Onte Onte	Jan. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average
	Average Weekly Earnings														73.84	75.02	74.33	74.00	73.44	78.02	80.46	81.50	74.88	75.20	75.26	75.87	(2.33
GE REGION	Pay-	148.9	150.9	150.3	148.1	152.8	160.3	168.0	161.5	161.7	162.7	157.8	156.2		161.9	162.5	159.2	158.5	159.4	171.0	176.5	178.3	178.1	175.3	166.5	169.4	T-29T
16. NICKEL RANGE REGION	Employ- ment	117.0	116.7	116.0	113.7	120.4	126.7	130.0	124.5	123.4	122.1	117.0	120.5		122.5	121.0	119.7	119.9	121.6	122.9	122.9	122.6	133.3	130.6	123.9	125.1	123.0
16.	Date 1952	Jan, 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1952 Average	1953	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May l	June 1	July 1	Aug. 1	Sept.1	Oct. 1	Nov. 1	Dec. 1	1953 Average

### MANUFACTURING STATISTICS BY CENTRES - 1950 -

	BY CENTRES - 195	50 -	
Centre	No. of Establishments	No. of Employees	Gross Value of Production \$'000
Metropolitan Region Toronto New Toronto Leaside Weston Long Branch Oakville Acton Georgetown Newmarket Brampton Aurora Swansea Milton Streetsville Mimico	4,011 37 50 46 34 43 20 18 19 30 14 9 13 13 31	160,063 6,589 8,918 2,716 1,241 1,449 1,019 1,053 1,028 1,080 647 718 638 313 618	1,686,923 124,431 101,285 27,654 14,491 13,754 11,252 10,220 9,776 8,975 7,826 7,788 6,522 5,048 4,955 140,507
Others Total	<u>319</u> 4,707	13,752 201,842	2,181,407
Burlington Region  Hamilton Brantford Paris Dundas Burlington Others	549 150 24 30 16 65	54,823 13,544 1,498 1,307 652 864 72,688	625,481 125,828 11,648 8,280 7,964 8,930
Total  Niagara Region St. Catharines Welland Niagara Falls Thorold Merritton Fort Erie Grimsby Port Dalhousie Beamsville Others	111 58 81 26 16 18 17 5 13 148	10,415 8,016 6,106 2,167 1,903 657 532 254 150 6,133	105,507 97,308 77,563 36,035 23,180 11,896 3,931 1,631 1,000 175,109
Total  Lake Eric Region  Simcoe Dunnville Caledonia Waterford Port Dover Others  Total	30 20 11 7 9 71	1,344 1,036 292 146 113 675	20,809 7,810 4,601 1,152 1,080 24,182

Centre	No. of Establishments	No. of Employees	Gross Value of Production \$'000
Upper Thames River Region London Woodstock St. Thomas Ingersoll Tillsonburg Strathroy Tavistock West Lorne Norwich Others	275 65 44 27 26 19 9 7 8	15,781 3,797 2,343 1,310 794 491 170 215 102 2,103	158,624 39,405 17,886 14,808 11,520 3,256 1,962 1,591 1,177 43,398
Total	680	27,106	293,627
Border Region Windsor Chatham Leamington Wallaceburg Amherstburg Essex Ridgetown Tecumseh Dresden Harrow Tilbury (pt.)	280 72 17 25 11 14 12 5 12 11 5	34,901 3,879 1,158 2,927 918 270 284 268 160 99 182 1,831	564,871 67,981 27,788 27,628 13,201 2,302 2,062 1,830 1,746 1,393 1,288 22,432
Total	<u>578</u>	46,877	734,522
St. Clair River Region Sarnia Petrolia Forest Watford Others Total	49 13 12 8 47	7,512 464 217 129 166 8,488	169,803 8,415 1,557 1,051 2,202
Upper Grand River Region Kitchener Guelph Galt Waterloo Stratford Preston Hespeler St. Mary's Elmira Listowel New Hamburg Elora Milverton Harriston Mount Forest Palmerston Others	195 106 91 55 67 39 20 13 21 14 12 7 10 13 15 8	14,934 5,759 6,069 2,572 3,657 2,934 2,038 658 773 483 344 357 269 770 245 67 1,831	159,409 51,890 45,248 30,987 27,423 20,419 12,717 10,036 8,159 3,771 2,243 1,870 1,709 1,648 1,526 1,152 29,140
Total	892	43,760	409,347

<u>Centre</u>	No. of Establishments	No. of Employees	Gross Value of Production \$1000
Blue Water Region Owen Sound Barrie Orillia Goderich Midland Collingwood Hanover Kincardine Wingham Meaford Walkerton Seaforth Penetanguishene Chesley Southampton Clinton Durham Orangeville Blyth Port Elgin Exeter Others	52 25 47 17 21 19 22 13 16 18 17 13 13 13 13 13 14 5 9 7 380	2,484 1,000 1,914 537 810 1,094 1,061 470 400 418 476 285 419 387 324 173 246 201 33 211 119 1,751	15,284 14,631 12,886 8,957 8,088 6,549 5,994 2,820 2,820 2,521 2,467 2,376 2,370 2,114 2,025 1,851 1,440 1,410 1,217 1,052 1,052 1,052
Total	753	14,813	117,288
Kawartha Region Peterborough Port Hope Cobourg Lindsay Campbellford Newcastle Others	98 24 30 35 19 3	9,724 1,119 1,046 952 360 222 15,317	111,446 10,604 8,826 7,324 3,609 1,009 336,134
Total	600	28,740	478,952
Quinte Region Kingston Belleville Trenton Napanee Wellington Tweed Bloomfield Deseronto Picton Others	70 58 25 17 8 10 10 10 5 18	5,168 2,846 1,338 406 133 153 155 225 161 2,932	53,571 25,090 13,104 3,744 1,659 1,507 1,372 1,319 1,154 28,729
Total	492	13,517	131,249
Upper St. Lawrence Region Cornwall Brockville Gananoque Prescott Winchester Morrisburg Others Total	52 42 18 17 8 8 253	6,811 1,775 770 638 67 192 2,125	63,605 28,153 6,058 3,436 1,453 1,033 35,462

Centre	No. of Establishments	No. of Employees	Gross Value of Production \$'000
Ottawa Valley Region			,
Ottawa Pembroke	268 32	9,800 1,004	80,886 7,119
Perth	25	943	6,974
Renfrew	28	939	6,271
Arnprior	19	607	5,015
Eastview	17	308	4,966
Carleton Place	10	821	4,735
Almonte Others	11	335	3,479
Others	449	3,804	36,121
Total	859	18,561	155,566
Highlands Region			
Huntsville	16	460	5,695
North Bay	31	567	4,712
Gravenhurst	8	321	2,212
Others	255	3,213	26,599
Total	310	4,561	39,218
Clay Belt Region			
Timmins	26	631	4,537
New Liskeard	14	605	3,857
Hearst	8	244	2,498
Others	201	4,544	68,915
Total	249	6,024	79,807
Nickel Range			
Sudbury	43	907	8,670
Others	131	8,003	197,882
Total	174	8,910	206,552
Sault Region			
Sault Ste. Marie	54	7,343	109,521
Others	73	686	5,556
	tonger property and the second		
Total	<u>127</u>	8,029	115,077
Lakehead Region			
Fort William	50	3,046	45,209
Port Arthur	54	2,447	32,691
Sioux Lookout	7	101	1,274
Others	275	4,686	98,015
Total	386	10,280	177,189
10081	300	10,200	111,107
TOTAL PROVINCE	12,809	566,513	6,822,954

### CONSTRUCTION

The construction industry accounts for a large proportion of the total production of goods and services in Ontario. In Canada as a whole, construction provided eighteen per cent. of the Gross National Product in 1952. Seven per cent. of the labour force in Ontario was listed in the construction industry group at the 1951 Census. Greater proportions of the labour force are employed by the manufacturing, agriculture, service and trade industry groups. However, the production of complementary products and fittings such as furniture, electrical and plumbing fixtures, and ancillary services such as gas and water are affected by the activity of the construction industry. Together these employ a number comparable to the labour force directly engaged in construction. The occupations engaged in construction and complementary industries range from highly skilled tradesmen to labourers. The total salaries and wages paid to Ontario construction workers in 1951 amounted to \$446 million. Salaries and wages in manufacturing industries were \$1,669 million in the same year.

The industry produces both consumer and producer goods, and different factors affect activity in each. Although it is difficult to draw a line, residential and institutional building may be considered as consumer goods, and industrial, commercial and a large part of engineering construction as producer goods. In Ontario since the war, volume of residential building as indicated by dollar value of work performed has exceeded that of any other category. In 1953 residential construction made up 44 per cent. of total building construction and 28 per cent. of all construction, including engineering, as shown in Table II.

In terms of permits granted, residential construction accounted for 56 per cent. of proposed building in 1953. The predominance of residential construction is evident in Table II, which shows that residential building makes up more than 50 per cent. of construction activity in nearly all Regions. In the four exceptions, it is less than three per cent. below this level. This table is compiled from a Dominion Bureau of Statistics report which takes data from 293 Ontario municipalities including all the cities, and the larger towns, villages, townships, improvement districts and park commissions. A comparison of Ontario totals for proposed building construction as indicated by permits granted (Table II) and as estimated by the Dominion Bureau of Statistics (Table I) for 1953, shows coverage in the different categories as follows:

Type of Building	(1) Value of Permits Granted \$1000	(2) Estimated Value of Work Performed \$1000	Proportion $\frac{\binom{1}{2}}{\binom{2}{2}}$
Residential	373,397	442,300	84.4
Industrial	111,783	237,568	47.1
Commercial	95,552	173,487	55.1
Institutional	82,603	108,063	76.4
Other	4,809	47,946	10.0
TOTAL	668,144	1,009,364	66.2

The discrepancy is largely due to the difference between the amount estimated by the applicant for a building permit before the operation is undertaken and the cost of the project after completion as estimated by the Dominion Bureau of Statistics.

The determinants of residential building appear to be building need as measured by the number of families, and the relative level of rents, material and labour costs, and interest rates. Changes in family size and age composition, changes in habits and customs, and population movements, also influence residential building activity.

Residential building in the next few years may be affected by recent revisions in the National Housing Act to permit chartered banks to make mortgage loans. According to the Hon. R. H. Winters, Federal Minister of Public Works, "the main object of the legislation is to broaden the supply of mortgage money by making that form of investment more attractive, increasing the number of lenders and making more funds available for mortgage lending." (1)

Industrial and commercial building on the other hand, appears to be influenced by the level of general business activity, which affects the desire for enlarged productive capacity, and by the costs of building and interest rates. Construction in these two categories accounted for 41 per cent. of the estimated value of construction intended in 1953, and 31 per cent. of the value of permits granted in Ontario.

Institutional building, which made up 11 per cent. of intended building in Ontario, appears to be affected by factors less easy to define. Changes in customs and government policies may have as much long-term influence as size of population and cost of building.

Since construction is distributed according to population and industrial activity, and the raw materials are drawn from widely distributed areas, the industry has wide spatial as well as industrial influences.

As might be expected from its dominance in manufacturing and commercially activity in the Province, and the concentration of population in the Toronto area, the Metropolitan Region accounts for nearly one-half the value of building in Ontario, as indicated below. The proportion of Ontario's commercial construction carried on in the Region is 58 per cent. In the remaining Regions, proportional distribution of residential construction is closely, but not directly, related to population distribution. Regions with a low proportion of the total population have a comparatively low proportion of residential building, and heavily populated areas tend to attract more than their share of residential construction.

PER CENT. DISTRIBUTION BY REGIONS OF PROPOSED CONSTRUCTION
IN 1953 AS INDICATED BY BUILDING PERMITS DISTRIBUTED IN
ONTARIO

Region	Residen- tial	Indus- trial	Commer- trial	Institu- tional	Other	Total %
1 - Metropolitan 2 - Burlington 3 - Niagara 4 - Lake Erie 5 - Upper Thames 6 - Border 7 - St. Clair River 8 - Upper Grand River 9 - Blue Water 10 - Kawartha 11 - Quinte 12 - Upper St. Lawrence 13 - Ottawa Valley 14 - Highlands 15 - Clay Belt 16 - Nickel Range 17 - Sault 18 - Lakehead	47.1 9.0 6.4 0.3 3.2 4.8 1.3 5.5 1.3 4.5 1.1 7.9 0.7 0.5 1.6 1.8 1.6	48.9 4.5 2.1 0.3 2.7 10.2 1.7 8.2 2.1 8.8 1.0 2.0 2.9 0.5 0.2 0.8 0.2 2.9	57.6 8.2 4.1 0.4 2.6 4.1 1.6 3.1 0.8 2.0 1.1 0.6 9.3 0.5 0.9 0.7 1.5	33.6 14.5 2.8 0.6 1.9 4.2 0.8 4.1 2.1 7.6 3.4 1.4 14.5 1.1 1.1 2.9 1.5 2.1	84.4 0.7 0.2 0.3 1.3 10.6 0.6 0.4 0.1 0.2 0.2 0.2	0.7 0.5 1.5 1.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

<sup>(1)</sup> Hansard, December 16, 1953, p. 998.

Industrial construction is high in areas where manufacturing is important, such as the Border, Upper Grand River, Kawartha, and, of course, Metropolitan, Regions. In the Burlington and Niagara Regions, which in 1953 ranked second and fourth respectively in total manufacturing payroll, industrial construction was not as high as would have been expected if only this indicator of manufacturing activity had been considered. In the Niagara Region industrial building declined 22 per cent. over 1952, but in the Burlington Region it was 4.7 per cent. higher than the previous year.

TABLE I - VALUE OF CONSTRUCTION WORK PERFORMED IN ONTARIO - 1953.

ESTIMATED INTENTIONS BY TYPE OF STRUCTURE

APP 2 day 20 52 120 221 2 200 1 2 2 2 2 2 2 2 2 2 2 2			-
Type of Structure	New \$ 0000	Repair \$'000	Total \$ 1000
Building Construction			
Residential	358,500	83,800	442,300
Industrial	126,697	40,474	167,171
Factories, plants and work shops Warehouses, storehouses, refrigerated storage etc.	36,938	4,628	41,566
Grain elevators	246	202	448
Mine and mill buildings	11,549	4,889	16,438
Stations, works offices and roadway buildings	2,669	4,626	7,295
Railway shops, engine houses,	0	0 770	1, 650
water and fuel stations	1,538	3,112	4,650
Total Industrial	179,637	57,931	237,568
Total Industrial	117,031	71975	2313700
Commercial			
Hotels, clubs, restaurants, cafeterias,			-1
tourist cabins	7,539	6,586	14,125
Office buildings	35,936 38,994	7,407 7,819	43,343 46,813
Stores, wholesale and retail Garages and service stations	11,750	2,112	13,862
Theatres, arenas and recreational buildings	2,828	555	3,383
Farm buildings (excluding dwellings)	23,200	17,248	40,448
Radio and television broadcasting, relay			00
and booster stations	6,981	1,277	8,258 2,194
Aeroplane hangers	1,999 740	195 321	1,061
Laundries and dry cleaning establishments	140	J2.1	1,001
Total Commercial	129,967	43,520	173,487
100011			
Institutional	10 000	0.000	50 055
Schools and other educational buildings	48,329	3,926 1,158	52,255 10,502
Churches and other religious buildings	9,344	1,100	10,002
Hospitals, sanataria, clinics, first aid stations etc.	25,442	3,262	28,704
Other institutional buildings	15,009	1,593	16,602
			- 0 - 6-
Total Institutional	98,124	9,939	108,063
and the state of t			
Other Building Construction Armouries, barracks, drill halls, etc.	27,591	4,975	32,566
Bunkhouses, dormitories, cookeries etc.	12,815	1,473.	
All other building construction	859	233	1,092
	1 (-	( (0-	15 01 6
Total other building construction	41,265	6,681	47,946
T. I. I. Wallding Construction	807,493	201.871	1,009,364
Total building Construction	001,193	201,011	2,30,7,30,

Type of Structure	<u>New</u> \$ 000	Repair \$'000	Total \$'000
Engineering Construction Streets, highways, roads, parking lots, etc., including grading, scraping, oiling and filling,			
maintenance of guard rails Sidewalks and paths	104,051 3,840	21,065	
Bridges, trestles, culverts, over-passes, tunnels and subways	35,894	8,362	44,256
Waterworks and sewage systems and connection, tile drains and drainage ditches	27,663	2,674	30,337
Dams, reservoirs, water storage tanks, irrigation and land projects	3,936	1,392	5,328
Electric stations, power plants, distribution lines and street lighting	185,882	20,977	206,859
Railway tracklaying, surfacing and maintenance, signals and interlockers	15,928	54,664	70,592
Telephone and telegraph lines, underground and marine cables	23,025	- /	
Fences, snowsheds, signs Oil refineries, oil and gas pumping stations,	905	2,190	3,095
pipelines, storage tanks, wells Marine construction	29,859 8,376	1,096	30,955 9,827
Aerodromes, landing fields, runways, tarmacs Other engineering construction	9,192	1,520 903	10,712 21,751
Total Engineering Construction	469,399	125,655	595,054
TOTAL VALUE ALL CONSTRUCTION	1,276,892	327,526	1,604,418

Source of Original Figures: Dominion Bureau of Statistics, Construction in Canada 1951-53.

TABLE II - PROPOSED BUILDING CONSTRUCTION IN 1953 AS INDICATED BY BUILDING PERMITS ISSUED IN ONTARIO, BY REGIONS, SHOWING PROPORTION OF TYPE OF BUILDING AND PER CENT. CHANGE FROM TOTAL IN 1952.

A STATE OF THE STA								Percent
								Change 1953
Region		Residential	Industrial	F 3	Institutional	Other	Total	from 1952
1 - Metropolitan	\$ \$ 000	175,971	54,677	54,958	27,761	4,061	317,428	+40.5
	5° 2° 2° 3° 3° 3° 3° 3° 3° 3° 3° 3° 3° 3° 3° 3°		7 - 1 200 - 1		750	٠. کېږ	58 404	430.0
2 - Burlington			4, 50 T		20.02	0 H	100.0	1.00
3 - Niagara	000,\$		2,328		2,277	0	32,306	+ 1.8
	82		7.2		0.7	t	100.0	,
4 - Lake Erie	\$ 1000		377		475	Н	2,407	- 3.9
,	₽€.		15.7		19.7	!	100.0	(
5 - Upper Thames	000,		2,997		1,595	ET C	7.TO'6T	-12.1
	5° (		15.0		0.4 0.0	J.	26 533	0 087
6 - Border	** 000 %		31.1		9.5	À .	100.0	1
7 - St. Clair Biver	00018		1,917		, 662	63	8,988	-10.0
	88		21.3		7.4	7.0	100.0	
8 - Upper Grand River	\$ ,000		267,6		3,359	509	36,490	140.5
	BE		25.2		20.00	†•.⊥	TOO	i i
9 - Blue Water	000.\$		2,403		1,711	27	006,60	+35.9
	82		24.3		71.00	, ( )	αου	7 00
10 - Kawartha	\$ <del>}</del>		06/100		17 0	T 5	100,00	C.02+
4	8 C		20.00		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	٢.	10.486	+19.3
ı	) ) }		1 0 1		26.9	J	100.0	
12 - Upper St. Lawrence	\$ ,000		2,216		1,116	1.1	8,061	-11.3
	P6		27.5		13.8	0.1	100.0	
13 - Ottawa Valley	C00.\$		3,226		11,985	12	53,569	++3.2
	BR		0.9		22.4	C	TOO.00	0.5
14 - Highlands	\$ 1000		571		916	) O	0,4	0.21+
4 to 00	800		4°TT		0.CO		3,309	- 6.0
)	÷ ) )		9 1 7 9		27.6	1	100.0	
16 - Nickel Range	\$ ,000		857		2,355	オ	10,208	+46.1
	80		4.8		23.7	1	100.0	1
	\$ ,000		599		1,268	H	8,803	1° + +
	Be		o, v		74.4	2 .	100.0	701
18 - Lakehead	\$ 1000		3,261		1,703	2	12,309	1,00
	BS		26.5		13.8	T.0 .	100.0	(
TOTAL	000;		11,78		82,603	608,4	668,144	+35°8
	86		16.7		12°4	2.0	100.0	
Source of Original Figures:	DOMINI	lon bureau oi st	atistics, byec.					

### TRANSPORTATION

Excellent transportation facilities are to be found generally throughout the province. Not only by land but by the waterway system of the Great Lakes, can raw materials and finished products be moved cheaply. Southern Ontario is particularly favoured in this respect, being almost surrounded by navigable lakes and rivers.

### Water Transportation

The first method of transportation in Ontario took advantage of the natural highways provided by the many lakes and rivers. The portages around the numerous rapids, however, made the movement of goods and passengers slow and inconvenient. To overcome this difficulty, small, shallow canals were built along the St. Lawrence River as early as 1783. These were widened and deepened periodically, until in 1903 the whole of the St. Lawrence from Montreal to Kingston was equipped with 14-foot canals. On the Ottawa River the first system of canals was completed in 1834 but was later deepened to allow a 9-foot draught. The Rideau Canal was built between Ottawa and Kingston, 1832-34, so that military supplies could be transported at a safe distance from the United States in event of war. Being only five feet deep, it is not now used extensively.

Fourteen-foot navigation was available through the Welland Ship Canal by 1887. This canal contains eight locks and makes a total lift of 327 feet between lake levels. Although a canal was completed on the American side of the Sault Ste. Marie Rapids in 1855, no work was done on the Canadian side until the nineties. This canal, when completed in 1895, had the largest lock in Canada - 900 feet long, 60 feet wide and 18 feet 3 inches deep. At Sault Ste. Marie to-day, Canadian and American vessels use whichever locks are most convenient. But because of the better facilities (two of the locks are longer, and all four are wider than the Canadian lock), a much larger proportion of traffic uses the American locks than the Canadian one.

As the locks and canals were enlarged, larger ships were built. Flatbottomed, open bateaux or Durham boats on the rivers, and various kinds of sailing vessels on the Great Lakes, followed the canoe as important means of water transportation. In 1815, there were fifteen steamers in Canadian waters, three of them American-owned. By 1834, a steamer was running regularly between Toronto and Kingston.

The character and position of water transportation changed as new methods of transportation were introduced and old methods were improved. Passenger traffic suffered from competition, first from the railway and then from the automobile. Freight traffic, however, because it is cheaper to transport bulky articles by water than by land, has been able to maintain and even to improve its position. The success of Canadian inland shipping has always depended primarily on the transport of bulk freight from west to east.

During 1953, a record total of 33.4 million tons of freight was locked through Canadian canals, an increase of more than two million tons or 6.5 per cent. compared with 1952. The Welland Ship canal showed the greatest increase, with a gain of 1.7 million tons or 9.3 per cent. over the previous year. The Canadian Sault Ste. Marie canal and the St. Lawrence system showed an increase of 2.9 per cent. and 2.5 per cent. respectively over 1952. Increased tonnages of soft coal and iron ore shipped through the Welland canal, and crude oil and petroleum through the St. Lawrence system were largely responsible for the increase.

New highs were also established during the 1953 season for the number of vessel passages, registered tonnage, and number of passengers and pleasure craft. The number of passengers totalled 112,082 as compared with 104,135 in 1952. Ninety-four per cent. of these passed through the Canadian Sault Ste. Marie canal.

At the time of writing, it is still not known whether the United States will join with Canada in the construction of the St. Lawrence Seaway. It is expected that Canada will go ahead with plans for the Seaway by herself, if necessary.

### FREIGHT TONNAGE LOCKED THROUGH SELECTED CANALS

	1921	1951	1953
Trent Rideau Sault Ste. Marie St. Lawrence system Welland Ship	44,247 95,012 1,997,592 3,734,065 3,076,422	354 1,198 2,805,392 9,916,857 16,197,924	239 1,531 3,389,409 10,081,992 19,571,875
ALL CANADIAN CANALS	9,407,021	29,325,034	33,402,789

Source: Dominion Bureau of Statistics, Shipping Report.

### FREIGHT TONNAGE, 1953

Freight	Sault Ste. Marie Canal	St. Lawrence Canals	Welland Ship Canal
Coal, Soft Flour Iron ore Oil and gasoline Paper Pulpwood Sand Stone Wheat Other grain All other freight	268,536 106,883 702 326,283 - 183,140 - 110,138 523,957 963,298 906,472	1,559,219 14,463 112,288 1,259,492 236,802 494,616 269,195 2,081,349 2,086,211 1,968,357	5,950,193 13,664 2,988,630 2,334,037 420,103 500,163 235,689  2,795,429 2,456,197 1,877,770
TOTAL	3,389,409	10,081,992	19,571,875

Source: Dominion Bureau of Statistics, Summary of Canal Statistics.

### Road Transportation

The first settlements were established along the St. Lawrence River and the north shore of Lake Ontario for these waterways provided the fastest and easiest means of transportation. The first main roads paralleled these waterways, later branching out as settlers pushed farther inland.

Conditions in Upper Canada were not favourable to good roads. Severe frosts broke up surfaced roads and made soft roads impassable because of mud; a way had to be cleared through forests and swamps; and the many and various sized lakes meant detours, bridges, or fords. Added to these difficulties were the scattered population and limited revenue. In the 1890's roads were constructed and maintained either by townships or toll companies, and statute labour was still enforced. It was not until 1913 that a highways department was established in Ontario. At the same time provision was made for the payment of a subsidy of 20 per cent. of the cost of county roads and 40 per cent. of the cost of trunk roads. In 1917 the government was empowered to take over any highway and assume sole responsibility for its construction and maintenance. The Dominion Government also became more active in this respect and established a separate highways branch in 1919.

Throughout most of northern Ontario, railways came before highways, the latter being built primarily as feeders and extending only short distances from the railway stations. Highway construction is both difficult and costly in this part of the Province because of the rocks and muskegs.

The rapid expansion in the number of motor vehicles was one of the prime motive forces in the drive for better roads. In 1903, automobiles were registered in Ontario and in Canada, for the first time. There were at that time 178 motor vehicles in Ontario. By 1915, this number had risen to 46,520, 48.8 per cent. of the 95,284 registered in Canada. In 1952, there was a total of 3,155,824 motor vehicles registered in Canada, with 1,291,753 or 40.9 per cent. in Ontario. In 1941, there was an average of one motor vehicle for every 5.1 persons in Ontario, and every 7.3 persons in Canada. In 1952, this had risen to one motor vehicle for every 3.7 persons in Ontario and every 4.6 in Canada. In the same year, there was one passenger car for every 4.7 persons in Ontario and for every 6.3 in Canada.

While the number of passenger automobiles in Ontario has increased by only 7 per cent. between 1941 and 1952, the number of privately-owned trucks has risen by 166 per cent. to a new high of about 232,500. The number of trailers has also increased, but not so spectacularly, by 53.8 per cent., to about 74,000. Trucks are being used more and more widely to haul freight on both local and long-distance trips. A trucking service on a daily schedule from Halifax to Vancouver with a change of carrier at Toronto, was instituted during 1953. A great variety of goods is carried including farm and market garden produce, raw materials, and manufactured articles.

During 1953, 1,404,084 motor vehicle permits were issued in Ontario. This includes 1,115,563 for passenger cars and 257,708 for commercial vehicles.

In 1952, there were 81,281 miles of road in Ontario, an increase of 9.8 per cent. over the previous year. Of this total, 68.9 per cent. was surfaced with gravel and crushed stone, 14.8 per cent. with earth, and 2.5 per cent. with concrete. A bituminous covering was used on the remaining roads.

During 1953, work was carried out on approximately 200 highway projects. Among these was the highway which will run from Windsor to the Quebec border. Work on this project has been going on at several spots. For example, highway number two is being straightened, widened and improved between Windsor and Tilbury, and between London and Woodstock. It is expected that this part of the highway will connect with the Toronto By-pass. By-passes have also been started around Kingston and between Trenton and Belleville.

North-south traffic was greatly eased by the opening of the Bracebridge By-pass, which runs from three miles south of Bracebridge to about eleven miles south of Huntsville. Construction is underway on by-passes around both Orillia and Washago. Another important development on which construction was begun, is the Toronto-Peterborough cut-off. This highway will start a few miles north of Newcastle on Highway thirty-five and will cut through directly to the junction of Highways twenty-eight and seven-A, southwest of Peterborough.

Also of importance is the construction of mining access roads in Northern Ontario. These will not only open up new territory for mining and forestry, but will provide connecting links with already existing transportation facilities. Each year beginning in 1951, a grant of one million dollars has been made to the Department of Mines for the building of these roads. To the end of 1953 the Department has undertaken to construct about twenty-two access roads, most of which are now in use.

Work is also being carried out on various sections of the Trans-Canada Highway. Passed in December, 1949, the Trans-Canada Highway Act authorized the Minister of Resources and Development to make agreements with the provinces for the construction of this highway. Up to 50 per cent. of the cost to the Province of new construction, or of highways previously constructed and later incorporated as part of the Trans-Canada Highway, would be paid by the Federal Government. All the provinces except Quebec have now signed agreements. Each province may choose the route of the Highway within its own area, providing that neighbouring provinces agree on the point at which it crosses provincial borders and, further, that it is the shortest practical east-west route. The actual construction of the Highway is under the direct control of the Provincial Highway or Provincial Public Works Departments, but must meet the specifications set out in the Act.

It is estimated that, within Ontario, the Trans-Canada Highway will stretch for about 1400 miles. From December 1949 to December 1953, 193 miles of paving and 349 miles of grading were completed to meet the required specifications.

This does not include mileage for highways incorporated into the Trans-Canada Highway, but built prior to December 1949.

The route of the Trans-Canada Highway will be as follows: from the Quebec border to Ottawa it will run over, or close to, highway number seventeen; it will then generally follow highway fifteen to Carleton Place and Perth, seven to Peterborough and Lindsay, and twelve to Orillia and Waubaushene. From that point it will strike north to Parry Sound, French River and Sudbury, and west to Chapleau, White River and Schreiber. It will then approximate highway seventeen to Nipigon, Fort William, Kenora, and the Manitoba border.

### Rail Transportation

The success of the canals in the 1840's, and the commitments of the Government regarding their construction and improvement, served initially to retard the expansion of railways. In 1850 there were only sixty-six miles of railway in the united province of Canada, most of it being in Quebec. When the railway building boom did come, it was motivated not by a desire to increase local traffic, but rather a desire to draw the traffic of the West through Ontario instead of through the United States. Some canals, such as the Rideau and Trent, did suffer and fell into disuse owing to railway competition, but others, where the railways acted as feeders, for example by bringing grain from the west to be transferred to lake vessels, gained greatly as a result of the new development.

To-day Southern Ontario has the most complete railway network of any part of Canada, with more than 6,000 miles of standard gauge track in operation. This system tends to centre around Toronto from which point direct lines lead to almost every part of the country. Hamilton is a second centre of concentration, serving the Niagara Peninsula and southwestern Ontario. St. Thomas is also important because through it pass the American lines on their time-and-mileage-saving shortcut between Detroit and Buffalo. The Michigan Central Railway, operating 370 miles of single track in 1951, huns from Detroit to Windsor, St. Thomas, Welland, Niagara Falls and Buffalo. The Wabash Railroad follows the same general route. The Chesapeake and Ohio Railway (Pere Marquette District), runs from Walkerville to Sarnia and also to St. Thomas. Although Ottawa is an important centre for the eastern part of the Province, much of the rail traffic in the east tends to flow into Montreal.

Northern Ontario has over 4,000 miles of railway. Making up the greater part of this mileage, are three east-west, trans-provincial railways, (two operated by the Canadian National Railways, and one by the Canadian Pacific Railway), and one north-south line from North Bay to Moosonee. This latter railway, called the Ontario Northland since 1946, was begun in 1902. New Liskeard was reached in 1904, Cochrane in 1908, and Moosonee in 1932. In 1951, 573.7 miles of single track were in operation.

North Bay, with a population of 17,944, is a major railway centre for Northern Ontario. It is a divisional point for two trans-continental railways, and is also the head office and main terminal of the Ontario Northland. Except for the far north-western mining areas, all important settlements in the Province have adequate rail service.

Electric railways cannot be operated economically in Canada except in urban centres because the long distances to be travelled and the light traffic in both freight and passengers do not justify the necessary capital outlay. The first electric railway line in Canada, and probably in North America, was opened in June 1886 and operated between Windsor and Walkerville. In 1890, electric railways were established in Victoria and Vancouver, and by 1892 the Ottawa, Montreal, and Toronto systems were electrified. The first underground electric railway in Canada was opened in Toronto, early in 1954.

Track mileage has been gradually decreasing in recent years. In 1941 there were 382.1 miles of first main track in operation but by 1951, the mileage had dropped to 278.6, a reduction of 27.1 per cent. This has happened largely because many municipalities have turned to trackless trolley busses or motor busses. The number of fare passengers carried, including those carried by motor and trolley busses, has increased over the same period, from 288,274,733 to 460,330,726, a rise of 59.7 per cent. The Toronto Transportation Commission operated 106.4

miles of first main track in 1951, 38.2 per cent. of the Ontario total, and carried 302,889,938 passengers, or 65.8 per cent. of all those carried in the Province.

### Air Transportation

Although natural conditions in Canada, with its vast distances and many almost inaccessible areas, favoured the development of air transportation, little interest was shown until after World War I. Many wartime pilots were then eager to develop this new field and air services to remote areas, air forestry patrols, and inter-city services were gradually established. Air-mail services were begun about Christmas, 1927, and have since expanded rapidly. In 1932 it was decided that the Federal Government had exclusive jurisdiction over aviation. In 1937, the Trans-Canada Air Lines was established by Act of Parliament to provide a Canadian trans-continental air service and to act as a link in the east-west airway system. With World War II came a period of intensive construction of airports and airdromes, largely to meet the requirements of the British Commonwealth Air Training Plan. When the war ended, many pilots entered the field of commercial flying and were either absorbed by existing enterprises or aided in the development of new ones. Trans-Atlantic air services begun during the War, were turned over to Trans-Canada Air Lines for regularly scheduled operations. Canadian Pacific Air Lines grew out of the amalgamation of a number of small commercial operators, its aim being primarily to service the northern part of Canada. In 1949, it was authorized to provide trans-Pacific service. In addition to T C.A. and C.P.A. there are four smaller domestic lines licenced to operate scheduled services in Canada. Only one of these, Central Northern Airways Limited, operates in Ontario.

The Division of Air Services of the Ontario Department of Lands and Forests recorded 12,800 flight hours during the fiscal year 1951-52. Included in this figure were over 5,000 hours spent in fire detection and suppression, 3,500 in administration purposes, 2,100 looking after fish and wildlife, 900 for timber management, and 170 hours spent on mercy flights. Vertical photography for forest resources inventory was carried out over an area of more than 11,000 square miles.

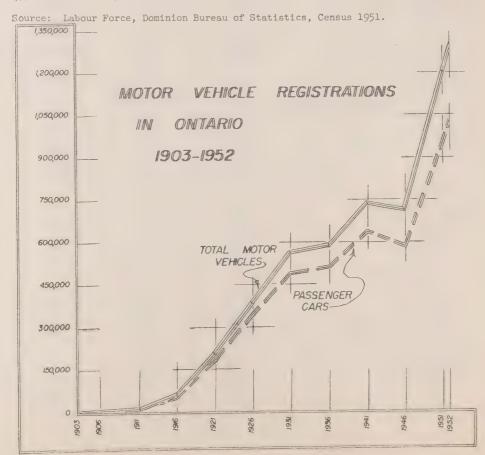
Toronto is one of the greatest concentration points of air routes in Canada, with direct lines to Montreal, western Canada, Chicago, Cleveland, Buffalo, New York and Bermuda. Regular weekly trans-Atlantic services direct from Toronto were begun November 1, 1953. Among the new routes to open in 1954 will be one linking Sudbury, Sault Ste. Marie, North Bay, Ottawa and Montreal. There are many other air ports and air harbours throughout the Province. In 1951 there were seventy-nine landing areas in Ontario - fifty-nine land ports and twenty water ports - or 24.3 per cent. of all landing areas in Canada. Thirty-four of the land ports and one of the water ports were lighted. Thirty-nine of the fields were hard surfaced. In addition to these regular landing areas, it is possible to land and take off from almost any point along the shores of the Great Lakes, Muskoka Lakes, Rideau Lakes, many lakes in Algonquin Park and virtually any lake in Northern Ontario. Almost every point in the Province is thus easily accessible by air.

Expansion of air services in Northern Ontario took place rapidly from the 1920's. The speed and ease of air transportation have greatly facilitated mining activities, especially in areas which would otherwise be inaccessible. Aircraft have also been regularly used for forest sketching, patrol, and fire suppression. In addition, very large areas have been mapped by aerial photography each year. Development in the settled areas to the south was much much slower, primarily because of the expense of providing the necessary ground facilities when other means of transportation were already established.

## LABOUR FORCE (1) IN THE TRANSPORTATION INDUSTRY, 1951

	Canada (2	% of Total	<u>Ontario</u>	% of Total
Air transport and airports Bus and coach transportation (interurban) Steam railways (inc. express and	10,469 8,055	3.1 2.4	1,766 2,189	1.7
telegraph service) Taxicab Truck transportation	170,956 22,010 60,554	51.4 6.6 18.2	54,757 5,762 21,491	53.7 5.7 21.1
Urban and suburban transportation Water transportation Services incidental to transportation	21,831 23,919 1,809	6.6 7.2 0.5	8,785 5,173 661	8.6 5.1 0.6
Services incidental to water transportation Other transportation Not stated	n 12,242 948 105	3.7 0.3 _(3)	1,202 219 16	0.2
TOTAL	332,898	100.0	102,021	100.0
Total Labour Force 5	,286,153		1,884,941	

(1) 14 years of age and over(2) Not including Yukon and Northwest Territories(3) Less than 0.1%



## 1952 PASSENGER AND COMMERCIAL MOTOR VEHICLE REGISTRATION

	Passeng Vehicl	es	Commer Vehic	les	Tota	.1
Region l - Metropolitan Halton Peel York	304,114 11,242 13,887 278,985	29.6 1.1 1.4 27.1	69,069 2,779 3,469 62,821	1.1	373,183 14,021 17,356 341,806	28.8 1.1 1.3 26.4
Region 2 - Burlington Brant Wentworth		7.4 1.6 5.8	15,032 3,379 11,653		91,484 20,097 71,387	7.1 1.6 5.5
Region 3 - Niagara Lincoln Welland	50,414 21,161 29,253	5.0 2.1 2.9	11,297 5,325 5,972	4.7 2.2 2.5	61,711 26,486 35,225	2.1
Region 4 - Lake Erie Haldimand Norfolk	17,082 6,812 10,270	1.7 0.7 1.0	4,821 1,960 2,861	0.8	21,903 8,772 13,131	1.7 0.7 1.0
Region 5 - Upper Thames Elgin Middlesex Oxford	69,379 13,893 39,384 16,102		15,506 3,342 8,006 4,158	1.4	84,885 17,235 47,390 20,260	6.6 1.3 3.7 1.6
Region 6 - Border Essex Kent	69,160 47,294 21,866	6.7 4.6 2.1	16,787 10,605 6,182	6.9	85,947 57,899 28,048	6.7
Region 7 - St. Clair River Lambton	19,028	1.9 1.9	3,967 3,967	1.6 1.6	22,995 22,995	1.8 1.8
Region 8 - Upper Grand River Perth Waterloo Wellington	63,023 13,779 30,211 19,033	6.1 1.3 2.9 1.9	11,975 2,930 5,498 3,547	5.0 1.2 2.3 1.5	35,709	5.8 1.3 2.8 1.7
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	65,239 11,176 3,886 14,302 12,594 23,281	6.4 1.1 0.4 1.4 1.2 2.3	15,235 2,498 970 2,825 3,011 5,931	6.2 1.0 0.4 1.2 1.2 2.4	80,474 13,674 4,856 17,127 15,605 29,212	1.3
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	20,940	5.4 0.7 2.0 1.3 0.7 0.7	11,875 1,544 4,067 2,672 1,639 1,953	4.9 0.6 1.7 1.1 0.7 0.8	67,099 8,532 25,007 16,308 8,541 8,711	5.2 0.7 1.9 1.2 0.7
Region 11 - Quinte Frontenac Hastings Lennox and Addington Prince Edward	40,531 13,591 17,922 4,743 4,275	3.9 1.3 1.7 0.5 0.4	10,101 3,217 4,248 1,394 1,242	4.1 1.3 1.7 0.6 0.5	50,632 16,808 22,170 6,137 5,517	3.9 1.3 1.7 0.5 0.4
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	29,575 3,988 3,829 4,499 8,492 8,767	2.9 0.4 0.4 0.8 0.9	6,587 916 840 923 2,154 1,754	2.7 0.4 0.3 0.4 0.9 0.7	36,162 4,904 4,669 5,522 10,646 10,521	2.8 0.4 0.4 0.8 0.8

	Passenge Vehicle	es	Commer Vehic	les	Tota No.	1 %
Region 13 - Ottawa Valley Carleton	No.  76,728 49,267	% 7.5 4.7	No.  15,981  8,537	6.6 3.5 0.8	92,709 57,804	7.2 4.4 0.8
Lanark Prescott Renfrew Russell	8,073 3,668 12,969 2,751	0.8 0.4 1.3 0.3	1,861 1,197 3,491 895	0.5	9,934 4,865 16,460 3,646	0.4
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	16,978 1,619 4,640 6,515 4,204	1.7 0.2 0.5 0.6 0.4	7,515 745 1,909 2,957 1,904	3.1 0.3 0.8 1.2 0.8	24,493 2,364 6,549 9,472 6,108	1.9 0.2 0.5 0.7 0.5
Region 15 - Clay Belt Cochrane Timiskaming	17,776 8,351 9,425	1.7 0.8 0.9	7,252 3,239 4,013	2.9 1.3 1.6	25,028 11,590 13,438	1.9 0.9 1.0
Region 16 - Nickel Range Manitoulin Sudbury	18,215 1,561 16,654	1.8 0.2 1.6	6,526 762 5,764	2.7 0.3 2.4	24,741 2,323 22,418	1.9 0.2 1.7
Region 17 - Sault Algoma	10,396 10,396	1.0	3,527 3,527	1.4	13,923 13,923	1.1 1.1
Region 18 - Lakehead Kenora Rainy River Thunder Bay	24,123 4,319 2,704 17,100	2.4 0.4 0.3 1.7	9,655 2,359 1,410 5,886	4.0 1.0 0.6 2.4	33,778 6,678 4,114 22,986	2.6 0.5 0.3 1.8
Non-residents	1,379	0.1	883	0.4	2,262	0.2
Dual Purpose Motorcycles					9,939 13,407	0.8
Total	1,024,816	100.0	243,591	100.0	1,291,753	100.0

Source: Motor Vehicles Branch, Ontario Department of Highways.

## HIGHWAYS AND ROADS - MILEAGES - BY COUNTIES - 1952

	King's Highways	County Roads	Organized Township Roads	Urban Roads	(1) Total	) 4
Region 1 - Metropolitan Halton Peel York	350.97 82.53 117.02 151.42	624.52 147.20 143.20 334.12	3,052.48 443.70 655.20 1,953.58	872.75 77.90 47.76 747.09		6.0
Region 2 - Burlington	254.56	306.22	1,047.39	415.61	2,023.78	2.5
Brant	88.16	116.79	531.34	83.97	820.26	1.0
Wentworth	166.40	189.43	516.05	331.64	1,203.52	1.5
Region 3 - Niagara	191.84	351.75	1,486.69	333.03	2,363.31	2.9
Lincoln	79.58	187.75	582.39	134.52	984.24	1.2
Welland	112.26	164.00	904.30	198.51	1,379.07	1.7
Region 4 - Lake Erie	141.55	404.70	1,585.11	123.61	2,254.97	2.8
Haldimand	78.44	164.40	585.61	51.51	879.96	1.1
Norfolk	63.11	240.30	999.50	72.10	1,375.01	1.7
Region 5 - Upper Thames	432.37	1,011.50	3,672.80	480.30	5,596.97	6.9
Elgin	116.24	282.50	893.50	98.70	1,390.94	1.7
Middlesex	200.02	511.50	1,698.40	241.10	2,651.02	3.3
Oxford	116.11	217.50	1,080.90	140.50	1,555.01	1.9
Region 6 - Border	354.65	570.55	2,354.74	703.82	3,983.76	4.9
Essex	177.01	242.55	1,028.16	547.43	1,995.15	
Kent	177.64	328.00	1,326.58	156.39	1,988.61	
Region 7 - St. Clair R. Lambton  Region 8 - Upper Grand F	155.05	234.00 234.00	1,393.66 1,393.66	226.49	2,009.20 2,009.20	2.5
Perth Waterloo Wellington	352.78	812.93	2,686.62	648.20	4,500.53	5.5
	132.44	230.63	995.50	138.63	1,497.20	1.8
	77.58	206.90	551.09	327.86	1,163.43	1.4
	142.76	375.40	1,140.03	181.71	1,839.90	2.3
Region 9 - Blue Water	876.76	1,497.58	8,072.80	673.39	11,120.53	13.7
Bruce	162.55	303.53	1,625.10	117.08	2,208.26	2.7
Dufferin	65.76	166.20	754.60	31.99	1,018.55	1.3
Grey	145.86	359.20	2,065.70	154.10	2,724.86	3.4
Huron	205.30	400.15	1,484.25	127.34	2,217.04	2.7
Simcoe	297.29	268.50	2,143.15	242.88	2,951.82	3.6
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	615.96 103.25 165.65 119.81 125.90 101.35	964.31 150.00 225.26 201.80 227.20 160.05	5,136.85 999.60 1,114.60 930.50 917.10 1,175.05	602.51 67.60 228.36 109.80 75.95 120.80	7,465.53 1,320.45 1,733.87 1,424.01 1,429.95 1,557.25	9.2 1.6 2.1 1.8 1.8
Region 11 - Quinte	548.73	808.68	3,458.05	262.68	5,161.41	6.4
Frontenac	154.33	165.25	951.80	78.25	1,377.50	1.7
Hastings	211.99	283.59	1,502.68	138.34	2,192.00	2.7
Lennox and Addington	129.25	170.21	648.30	25.49	973.25	1.2
Prince Edward	53.16	189.63	355.27	20.60	618.66	0.8
Region 12 - Upper St. Law Dundas Glengarry Grenville Leeds Stormont	72.29	808.40	2,700.94	156.41	4,038.04	5.0
	49.07	140.45	448.70	20.58	658.80	0.8
	59.81	150.65	515.00	16.97	742.43	0.9
	48.98	151.70	491.48	26.60	718.76	0.9
	172.87	194.40	836.76	66.95	1,270.98	1.6
	41.56	171.20	409.00	25.31	647.07	0.8

	King's Highways	County Roads	Organized Township Roads	Urtau. <u>5.9</u> 18	(1) Total	<u> </u>
Region 13 - Ottawa Vall Carleton Lanark Prescott Renfrew Russell	ey 546.64 117.62 94.87 52.75 261.43 19.97	1,024.38 231.45 228.10 179.68 228.30 156.85	1,063.25 1,000.20 522.50 1,688.00 502.80	619.68 407.90 99.53 17.98 84.02 10.25	7,079.85 1,820.22 1,433.70 7(2.91 2,363.15 689.87	8.7 2.2 1.8 1.0 3.9 0.8
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	613.61 59.90 109.30 315.51 128.90	- - - -	2,900.80 476.00 843.00 582.80 999.00	283.55 - 109.69 103.05 70.81	5,190.36 641.70 1,223.09 1,381.06 1,944.51	6.4 0.8 1.5 1.7 2.4
Region 15 - Clay Belt Cochrane Timiskaming	605.00 396.00 209.00	40 40 60	1,367.00 731.80 635.20	158.41 94.06 64.35	4,075.26 2,501.51 1,573.75	5.0 3.1 1.9
Region 16 - Nickel Rang Manitoulin Sudbury	207.33 17.75 189.58		1,166.00 508.15 657.85	$\frac{165.30}{20.20}$ 145.10	2,778.48 865.50 1,912.98	3.4 1.1 2.3
Region 17 - Sault Algoma	203.25	-	655.55 655.55	124.75 124.75	2,189.40	2.7
Region 18 - Lakehead Kenora Rainy River Thunder Bay	1,047.33 451.43 107.75 488.15	-	1,411.88 193.29 577.40 641.19	327.67 65.21 49.25 213.21	4,548.77 1,325.87 1,054.95 2,167.95	5.6 1.6 1.3 2.7
Total	7,870.67	9,419.52	48,926.11	7,178.16	81,280.87	100.1

<sup>(1)</sup> The total figure includes development roads 2,709.72 miles and unorganized townships roads 5,176.69 miles.

NOTE: - Percentages do not add to 100.0 due to rounding.

Source: Ontario Department of Highways.

### COMMUNICATIONS

### Radio

Early in the 1920's, privately-owned broadcasting stations began to operate in Canada. These, however, tended to become established in the larger urban areas with the result that many people who lived in rural areas could not receive the programs. To remedy this situation, the Canadian Broadcasting Corporation was created in 1936 with instructions to build a chain of high-power stations across Canada. Work on plans for nation-wide radio coverage had to stop during World War II, but was later resumed.

The Canadian Broadcasting Corporation is responsible for regulations controlling the establishment and operation of networks, and for the character of all programs broadcast by both its own and privately-owned stations. It also reviews all applications for licences for new stations and for increases in power and changes in frequency or location. Two factors are involved in decisions on such matters. First, the present and proposed facilities of the Corporation must not be interfered with, and second, all high-power transmission facilities on both long and short-wave bands are reserved for the use of the Corporation.

Network operations (two or more stations broadcasting the same program at the same time) are restricted to the Canadian Broadcasting Corporation. In Ontario there are ten basic and three supplementary stations on the Trans-Canada network, nine basic and three supplementary on the Dominion network, and two supplementary stations (CFCL Timmins and CHNO Sudbury) on the French network.

The Corporation also has the sole right to bring in programs from the United States. In Ontario, however, there is one exception - CFRB Toronto is affiliated with the Columbia Broadcasting System. CBL and CJBC Toronto (both CBC stations) are affiliated with the National Broadcasting Company and the American Broadcasting Company respectively.

Privately-owned stations, in general, are limited to 5,000 watts power and most of the 47 stations in Ontario operate on 1,000 to 5;000 watts on the shared channels. In Ontario, however, CFRB Toronto and CKLW Windsor have operated on 50,000 watts since 1948. Two CBC stations, CBL and CJBC Toronto, also use 50,000 watts. The clear channels which were assigned to Canada by the North American Regional Broadcasting Agreement in 1937, are reserved for CBC stations, four of which operate in Ontario. Clear channels are those on which the signal of a high-power station is protected from interference up to long distances or to the borders of the country in which it is situated.

The CBC derives its revenue partly from radio licence fees and partly from commercially sponsored programs. The private stations must depend for revenue on the commercial programs. At the end of 1953, there were 19 frequency modulation stations in Ontario.

It is estimated that in September 1953, 97.1 per cent. of all households in Ontario and 96.4 per cent. of those in Canada, had radios. In Ontario, 65.7 per cent. of the households had one radio and 31.4 per cent. had two or more, while for Canada as a whole, the figures were 72.3 per cent. and 24.1 per cent. respectively. In 1951, there were 338 radio announcers and 628 radio operators in Ontario.

RECEIVING STATION LICENCES

		THE DITTE OF THE	LITTOLIN	
Year	Canada	% Change	Ontario	% Change
1950-51	2,212,435		708,012	_
1951-52	2,313,944	4.6	726,778	2.6

Source: Department of Transport, Telecommunications Division, Ottawa.

PRODUCER'S	SALES OF	RADIO	RECEIVING	SETS,	ON PA	RIO
					Value	at
	Numbe	er Solo	f	Li	st Pr	ice (

		value at
	Number Sold	List Price(\$)
1951	282,239	25,722,755
1.952	267,459	23,786,737
1953(1st ten mos.)	248,076	21,212,979

Source: Dominion Bureau of Statistics, Radio and Television Receiving Sets.

### Television

There are two publicly-owned television stations in Ontario operated by the Canadian Broadcasting Corporation (CBLT Toronto, CBOT Ottawa) and two privately-owned stations (CKSO-TV Sudbury, CFPL-TV London). There is also one station in Montreal and one in Vancouver operated by the CBC. It is hoped that a coast-to-coast television network will be completed by 1956.

Technical aspects of telecasting are under the jurisdiction of the Department of Transport, while program content is controlled by the CBC.

It is estimated that in September 1953, 21.5 per cent. of the households in Ontario and 10.2 per cent. of the households in Canada, had television

## DOMESTIC SALES AND PRODUCTION OF TELEVISION SETS IN CANADA

	5	Sales		
	No.	Value (list price) \$	No.	
1949 (SeptDec. only) 1950 1951 1952	4,163 29,623 39,185 137,236	1,684,153 12,947,900 20,835,908 60,659,412	9,189 32,971 48,657 141,946	
1953 (First 10 mos.)	259,721	105,112,199	n.a.	

n.a. - not available

SALES OF TELEVISION SETS IN ONT	TARIO, BY	AREAS
(Ten months ending October	c, 1953)	
Toronto	78,513	
Hamilton-Niagara	31,467	
Windsor	16,624	
Ottawa & Eastern Ontario	22,435	
Other	11,824	
Total	160,863	

Source: Dominion Bureau of Statistics, Radio and Television Receiving Sets.

### Telegraphs and Cables

The number of telegrams sent (1) in 1952 dropped for Canada by about 180,000 to 19.5 million and for Ontario by about 236,000 to 6.1 million. The number of cablegrams (2), however, rose by 149,000 to 1.9 million for the whole of Canada. Money transfers reached a new high of \$19.5 million, an increase of 15.1 per cent. compared to 1951.

In 1951, there were 2,006 telegraph operators in Ontario.

	1952	
	Canada	Ontario
Pole line mileage	52,699	10,569
Wire mileage	437,581	134,079
Number of offices	5,256	1,383
Telegrams sent (1)	19,513,250	6,143,979

Source: Telegraph and Cable Statistics for 1952, Dominion Bureau of Statistics, Ottawa.

- (1) Includes commercial wireless messages to and from ships on the Great Lakes and St. Lawrence River and between stations.
- (2) Excludes cablegrams relayed.

### Telephones

In 1952 there were 490 telephone systems, with a total of 1,412,068 telephones, operating in Ontario. In addition, the Ontario Department of Lands and Forests operated 908 telephone stations in connection with its work of fire prevention. The Bell Telephone Company of Canada operated 1,240,884 telephones or 87.9 per cent. of the phones in Ontario in 1952. The number of telephones in that

system has increased by 6.7 per cent. compared to the previous year. Other telephone systems operated 171,184 telephones, 4.4 per cent. more than in 1951. In the same year, there were 331 mobile and 35,637 manual telephones.

# TELEPHONES PER 100 POPULATION (as of December 31)

	Ontario	·Canada
1941	18.3	13.5
1951	28.4	21.8
1952	29.2	22.9

### NUMBER OF TELEPHONES IN ONTARIO, 1951

0. 1. 1. 1. 1. 1. 1.	Business	Residence
On individual lines	122,714	169,692
On party lines-rural	11,091	165,494
-other	15,182	535,101
Private branch exchange and extension	222,832	76,201
Public pay stations	18,158	***
Total	389,977	946,488

In 1951 there were 12,699 telehone operators in Ontario. Operators not employed by the various telephone systems are included in this figure.

### Newspapers

Weekly newspapers serve the smaller cities and towns and the rural areas of the Province, and are concerned primarily with local news. Daily newspapers have a broader news coverage and also tend to have a wider sphere of influence, extending into the areas surrounding the cities in which they are published. The larger metropolitan dailies, especially those of Toronto, extend even farther, and compete with the dailies of other urban centres. This is possible partly because newspapers can be transported so quickly and partly because the larger papers can afford exclusive features which are financially beyond the reach of the smaller ones.

During 1953, 299 weeklies and 42 dailies were published in Ontario. According to the Canadian Almanac, 208 publications of all kinds are printed in the area of metropolitan Toronto. These include three daily newspapers, several national trade and professional journals, national magazines, religious papers, and a number of foreign-language papers both daily and weekly.

Accurate circulation figures are relatively easy to obtain for daily newspapers since they subscribe to the Audit Bureau of Circulation requirements. "Net paid" figures are shown in the tables for these. Many weekly newspapers, however, do not subscribe to the Audit Bureau and in such cases total circulation (paid and free) is shown when these figures are supported by sworn statements or other reliable records.

### The Post Office

The Post Office Department was created in 1867 to handle all postal matters for Canada. To aid in the carrying out of this function, there were in operation by 1952, 12,305 post offices in Canada and 2,598 in Ontario. In the same year, letter carrier service was provided in 126 Canadian cities and towns by about 5,000 uniformed letter carriers. There were also approximately 5,200 rural mail routes covering about 120,750 miles and serving 397,100 rural mail boxes.

Since July 1, 1948, all first-class domestic mail up to and including one ounce in weight has been carried by air between two Canadian points, if faster service is thus ensured.

RADIO	STATIONS -	1953
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		RADI	TO STATIONS	- 1953		
						ENCE
			Call		TOTAL	HOMES
			Letters	Power	Day	Night
D	,			Watts		
Region	1 -	- Metropolitan Toronto	¥ant	F0 000	667 670	606 550
		10101100	*CBL CFRB	50,000 50,000	661,670 619,430	626,550
			CHUM	1,000	137,050	-
			CJBC	50,000	451,610	420,590
			CKEY	5,000 day,	n.a.	n.a.
			CKFH	1,000 night 250	92,320	142,950
			OILL II	2,0	<i>y</i> = 9 <i>y</i> = 0	1,2,7,0
Region	2 -	Burlington			1 06	
		Brantford Hamilton	CKPC CHML	1,000	24,860 316,480	19,570 261,810
		110011111 0011	CJSH-FM	5,000 9,200	n.a.	n.a.
			CKOC	5,000	180,860	187,130
Dogion	5	N. d. or or or or				
Region	) ~	Niagara Niagara Falls	CHVC	5,000	15,170	11,350
		St. Catharines	CKTB	1,000	81,420	75,820
		Woodstock	CKOX	250	9,790	7,230
Region	Ε _	Upper Thames				
11001011		London	CFPL	5,000	86,220	71,640
		St. Thomas	CHLO	1,000	63,670	50,360
Dogion	6.	Thousand and				
Region	0 -	Border Chatham	CFCO	1,000	76,950	43,530
		Windsor	*CBE	10,000	35,920	32,750
			CKLW	50,000	128,090	101,070
Region	7 -	St. Clair River				
MCSTOII	, -	Sarnia	CHOK	5,000 day,	n.a.	n.a.
				1,000 night		
Region	8	Upper Grand River				
WERTON	0 -	Guelph	CJOY	250	14,520	13,350
		Kitchener - Waterloo	CKCR	250	27,400	20,080
		Stratford	CJCS	250	n.a.	n.a.
Region	9 -	Blue Water				
11001011		Barrie	CKBB	250	13,780	10,530
		Orillia	CFOR	1,000	24,410	17,210
		Owen Sound	CFOS	1,000	16,980	13,210
		Wingham	CKNX	1,000	68,480	55,040
Region	10 -	Kawartha				
		Oshawa	CKLB	250	n.a.	n.a.
		Peterborough	CHEX	1,000	n.a.	n.a.
Region	11 -	Quinte				
		Bellevile	CJBQ	250	22,360	18,100
		Kingston	CKWS	5,000	n.a.	n.a.
Region	12 -	Upper St. Lawrence				
		Brockville	CFJR	250	10,260	6,610
		Cornwall	CKSF	250	18,770	14,860
Region	13 -	Ottawa Valley				
		Ottawa	СВО	1,000	116,920	106,800
			CFRA	5,000	104,880	96,010
			CKOY	5,000 day, 1,000 night	92,180	87,600
		Pembroke	CHOV	1,000	16,060	13,800

			AUDIENCE TOTAL AREA		
	Call		RADIO H	IOMES	
	Letters	Power Watts	Day	Night	
Region 14 - Highlands North Bay	CFCH	1,000	n.a.	n.a.	
Region 15 - Clay Belt Kirkland Lake Timmins	CJKL CKGB CFCL	5,000 5,000 1,000	n.a. n.a.	n.a. n.a. n.a.	
Region 16 - Nickel Range Sudbury	CHNO CKSO	1,000 5,000	20,740 37,070	18,250 30,870	
Region 17 - Sault Sault Ste. Marie	CJIC	250	16,130	13,310	
Region 18 - Lakehead Fort Frances Fort William Kenora Port Arthur	CKFI CKPR CJRL CFPA	1,000 1,000 1,000 250	n.a. 21,970 7,190 17,340	n.a. 19,200 6,090 17,070	

<sup>\*</sup> Owned and operated by the Canadian Broadcasting Corporation.
n.a. not available
Source: Canadian Advertising, Fourth Quarter, 1953.

## TELEPHONES IN ONTARIO, 1952

	Bell Telephone Company	Other Telephone Systems	Ontari	0
	No.	No.	No.	%
Region 1 - Metropolitan	491,316	6,290	497,606	0.7
Halton	9,155	400	9,555	
Peel	12,209	2,679	14,888	
York	469,952	3,211	473,163	
Region 2 - Burlington	109,720	60	109,720	1.0
Brant	21,783	40	21,783	
Wentworth	87,937	100	87,937	
Region 3 - Niagara Lincoln Welland	61,724 30,091 31,633	5,811 5,811	67,535 30,091 37,444	4.8 2.1 2.7
Region 4 - Lake Erie	10,672	2,383	13,055	0.9
Haldimand	1,547		3,930	0.3
Norfolk	9,125		9,125	0.6
Region 5 - Upper Thames	70,878	13,820	84,698	6.0
Elgin	10,036	5,392	15,428	1.1
Middlesex	47,092	5,588	52,680	3.7
Oxford	13,750	2,840	16,590	1.2
Region 6 - Border	80,708	4,790	86,656	6.1
Essex	58,222		63,012	4.5
Kent	22,486		23,644	1.6
Region 7 - St. Clair River Lambton	16,667 16,667	4,231	20,898 20,898	1.5
Region 8 - Upper Grand River	67,186	8,559	75,745	5.4
Perth	12,087	4,035	16,122	1.1
Waterloo	38,705	2,049	40,754	2.9
Wellington	16,394	2,475	18,869	1.3
Region 9 - Blue Water	6,627	25,813	70,717	5.0
Bruce		5,986	9,952	0.7
Dufferin		870	3,202	0.2
Grey		4,138	16,223	1.2
Huron		6,508	13,135	0.9
Simcoe		8,311	28,205	2.0
Region 10 - Kawartha	54,052	9,841	63,893	4.5
Durham	5,399	1,875	7,274	0.5
Ontario	21,394	783	22,177	1.5
Peterborough	16,472	982	17,454	1.2
Victoria	5,366	2,371	7,737	0.5
Northumberland	5,421	3,830	9,251	0.7
Region 11 - Quinte	41,560	4,441	46,001	3.2
Frontenac	18,269	673	18,942	1.3
Hastings	17,724	1,717	19,441	1.4
Lennox and Addington	1,483	2,019	3,502	0.2
Prince Edward	4,084	32	4,116	0.3
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds	27,514	5,910	33,424	2.4
	3,398	-	3,398	0.2
	1,918	712	2,630	0.2
	3,316	894	4,210	0.3
	7,534	3,900	11,434	0.8
Stormont	11,348	404	11,752	0.9

	Bell Telephone Company No.	Other Telephone Systems No.	Total Teleph Ontari	
Region 13 - Ottawa Valley Carleton Lanark Prescott Renfrew Russell	112,655 90,118 7,673 3,596 10,076 1,192	7,704 1,247 1,670 228 3,949 610	120,359 91,365 9,343 3,824 14,025 1,802	8.5 6.4 0.7 0.3 1.0
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	19,018 4,911 10,837 3,270	3,680 882 1,055 1,222 521	22,698 882 5,966 12,059 3,791	1.6 0.1 0.4 0.8 0.3
Region 15 - Clay Belt Cochrane Timiskaming	- - -	26,866 14,792 12,074	26,866 14,792 12,074	1.9 1.0 0.9
Region 16 - Nickel Range Manitoulin Sudbury	18,773 18,773	3,695 1,579 2,116	22,468 1,579 20,889	1.6 0.1 1.5
Region 17 - Sault Algoma	13,508 13,508	1,387 1,387	14,895 14,895	1.1
Region 18 - Lakehead Kenora Rainy River Thunder Bay	29 12 - 17	34,805 6,015 3,540 25,250	34,834 6,027 3,540 25,267	2.5 0.4 0.3 1.8
Ontario Department of Lands and F	orests -	-	908	0.1
TOTAL	1,240,884	171,184	1,412,976	100.0

## CIRCULATION OF NEWSPAPERS IN ONTARIO, 1953

## Region 1 - Metropolitan

	Haltor	1		<u>Y</u>	ork	
	Acton Burlington Georgetown Milton Oakville(2)  Peel Bolton Brampton(2) Cooksville Port Credit Streetsvill	1,605 1,617 1,2,886 2,539 1,250 3,765 3,457 712 4,210	Aurora Etobicoke(  Lansing Willowdal Leaside Long Branc Markam Mount Denn Newmarket New Toront Richmond H Scarboroug Stouffvill Sutton	4,500 4,000 3,700 e 3,100 h 4,000 2,400 is 1,512 4,272 o 7,753 ill 3,504 h 3,580	West Hill Weston Woodbridge	11,000(c) 10,000(c) 13,000 2,475 5,000(c) 8,500(c) 4,500(c) 12,500(c) 10,000(c) 2,800(c) 10,000(c) 10,000(c) 6,800 10,327(c) 3,280 3,860
		Fore	ign Language	- Toronto:		
Ma Cro Est Fin	garian & cedonian(2) at & Serb onian(3) nish man	3,500 1,000 5,357 5,000 2,797 4,807 4,020 5,000	Hungarian Japanese(2 Jewish(2) Latvian Lithuanian	3,400 7,590 8,974 5,180	Polish(2) Russian Ukrainian(6	8,653 9,167 4,020 6) 6,470 7,989 2,050 4,000 15,000 5,500
Dailies:	Tor		230,272 M 396,957 E 223,208 E	Toronto	4,	1.a. 1996 E 1256 M
Region 2 -	- Barlington	<u>n</u>				
	Brant	<u>5</u>		Went	tworth	
	Burford Paris	900 1,875	Dundas Hamilton(2	1,895 18,000 36,200	Stoney Creek Waterdown	1,200 910
Dailies:	Brantford	19,080 E		Hamilton	84,249 E	
Region 3 -	Wlagara	1.11	ner In		Wellian.	i
Weeklies:		Beamsville Grimsby Niagara-on the-Lake Smithville	1,950 n- 784		Fort Eric Ridgeway Thorold	2,959 2,200 900
Dailies:		St. Catha	rines 20,882		Niagara Falls Welland-	12,792
					Port Colborne	12,923

## Region 4 - Lake Erie

		Haldin	nand		Norfolk	2
Weeklies:	Caledonia Cayuga Dunnville	1,216 1,019 3,207	Hagersvill Jarvis	.e 894 726	Delhi Port Dover Simcoe	1,950 1,340 7,872
Region 5 -	Upper Thames					
	Elgin		Middl	esex	Oxford	
Weeklies:	Aylmer Dutton Rodney West Lorne	2,226 1,056 950 600	Glencoe London Lucan Parkhill Strathroy	1,050 36,572 536 1,340 2,256	Ingersoll Norwich Tavistock Tillsonbury	2,105 1,156 810 4,402
Dailies	St. Thomas	10,226	London	86,074	Woodstock	8,844
Region 6 -	Border					
		Essex		Kent		
Weeklies:		er e n	2,383 977 850 3,200 752 1,432 1,100 3,851 1,650 1,900 4,314	Blenheim Bothwell Dresden(2) Merlin Ridgetown Thamesville Tilbury Wallaceburg Wheatley	1,926 1,000 1,828 1,710 600 1,705 635 1,410 4,125 1,000	
Dailies:	Windsor		73,242	Chatham	13,236	
Region 7 - St. Clair River						
			Lambton			
Waakliage		Alarington	1 052	Dotmolia 1	070	

Alvinston 1,053 Petrolia 1,970 Forest(2) 1,333 Watford 1,342 1,372 Weeklies:

Dailies: Sarnia 12,718

## Region 8 - Upper Grand River

	Pert	<u>h</u>	Waterlo	00	Wellingto	on
Weeklies:	Listowel Milverton Mitchell Monkton St. Marys	2,530 2,074 1,682 500 3,430	Ayr Elmira Hespeler New Hamburg Preston Waterloo	1,752 1,344 1,276 1,007 2,735 3,404	Arthur Drayton Elora Erin Fergus Harriston Mount Forest Palmerston	1,400 1,350 750 1,032 1,578 1,250 1,861 1,032
Dailies:	Stratford	9,699	Galt Kitchener	10,580 29,203	Guelph	11,808

## Region 9 - Blue Water

Wellou A - BI	ue water					
	Bruce		Dufferin		Grey	
Weeklies:	Chesley Kincardine Lucknow Mildmay Paisley Port Elgin Southampton Tara Teeswater Walkerton Wiarton	1,630 2,213 1,500 938 973 1,562 768 942 860 2,515 2,240	Grand Valley Orangeville Shelburne	981 3,217 2,000	Dundalk Durham Flesherton Hanover Markdale Meaford Owen Sound Thornbury	2,082 1,845 1,150 2,607 1,304 2,207 5,000(c) 1,035
Dailies:					Owen Sound	12,516
	Huron			Simc	<u>oe</u>	
Weeklies:	Blyth Brussels Clinton Exeter Goderich Seaforth(2) Wirgham Zurich	800 975 2,126 2,614 3,023 2,270 2,375 2,065 670	Alliston Barrie Beeton Bradford Camp Borden Coldwater Collingwood Creemore Elmvale	1,612 6,699 752 1,193 1,300 500 3,148 990 998	Midland Midland & Penetang(2) Orillia Stayner	3,800(c) 4,334 4,334 4,747 827
Dailies:				Orilli	a 5,207	
Region 10 - Ka	wartha					
	Durham		Ontario	)	Peterbor	ough
Weeklies:	Bowmanville Millbrook Orono Port Hope	3,961 664 786 603	Ajax Beaverton Cannington Pickering Port Perry Uxbridge	1,500 750 770 1,550 1,050 2,170	Havelock Norwood Peterborough	507 575 6,046
Dailies:	Port Hope	2,017	Oshawa	11,986	Peterborough	15,878
	Victoria	:		Northumb	erland	
Weeklies:	Bobcaygeon Fenelon Fall Lindsay(2)	777 s 950 3,094 5,287	Brighton Campbellford Cobourg Colborne(2)	984 1,850 3,796 503 535	Hastings Presqu'ile P Warkworth	n.a. rt. x400(c) 910
Dailies:	Lindsay	2,354				
Region 11 - Qu	inte					
	Frontena	ıc	Hastings	5	Lennox & Add	ington
Weeklies:			Bancroft Frankford Madoc Marmora Stirling Trenton Tweed	1,698 900 982 750 993 3,607 2,042	Napanee(2)	3,400 2,462

Region	11	_	Qui	nte	Cont.

Frontenac	Hastings	Lennox & Addington
With the second second	Management and Share	

Dailies: Kingston 18,959 Belleville 9,929

Prince Edward

Picton(2) 4,275 1,850 Weeklies:

### Region 12 - Upper St. Lawrence

•	Dundas		Glengarr	7	Grenvi.	Lle
Weeklies:	Chesterville Iroquois Morrisburg	1,125 1,050 1,000	Alexandria(2)	2,286 1,050	Cardinal Kemptville Prescott	625 1,700 1,900

		Le		Stormont		
Weeklies:	Athens Brockville	649 520	Gananoque Westport	2,472 986	Cornwall	4,000

Dailies: Brockville 6,949 Cornwall 11,835

### Region 13 - Ottawa Valley

	Carleton		Lanark		Prescot	tt
Weeklies:	Carp	55 <b>4</b>	Almonte Carleton Plac Lanark Perth Smiths Falls	1,750 ce2,104 1,460 3,080 3,982	Hawkesbury (Eng.) (2Fr.) Vankleek Hill	1,850 3,000 7,200 1,150

Dailies: Ottawa (2Eng) 59,695 59,222 (Fr.) 26,017

### Renfrew

Weeklies:	Arnprior Cobden	2,138 760	Pembroke(2)	4,854
	Eganville	2,350	Renfrew(2).	1,300

## Region 14 - Highlands

	Haliburton	Muskoka	Nipissing
Weeklies:	Haliburton (2) 1,000 1,542	Bracebridge(2)2,600 1,850 Gravenhurst 1,950 Huntsville 2,282	Cache Bay 600

Dailies: North Bay 11,906

### Region 14 - Highlands Cont.

### Parry Sound

Weeklies:

Burks Falls 1,273 Parry Sound 2,400 Powassan n.a.

### Region 15 - Clay Belt

Timiskaming Cochrane

Cochrane 1,261 Haileybury 800 Weeklies; Kapuskasing 1,170 New Liskeard 3,599

Timmins 10,480 Kirkland Lake 4,654

### Region 16 - Nickel Range

	Manitoulin	Manitoulin			
Weeklies:	Gore Bay 1,475 Little Current 1,720	Chapleau Espanola Massey	800 500 525	Sudbury(Fr (2Final)	1,851 1.)4,589 3,997 400
Dailies:			Sudbury	21,038	

Region 17 - Sault

### Algoma

Weeklies:

Blind River 540 Richards Bruce Mines 600 Landing Echo Bay 525 Thessalon 500 850

Dailies: Sault Ste. Marie 13,100

### Region 18 - Lakehead

	Kenora		Rainy Riv	er	Thunder	Bay
Weeklies:	Dryden	1,634	Atikokan Fort Frances Rainy River	800 3,590 1,188	Geraldton Nipigon Port Arthur (Finn)	1,100 1,448 2,600
Dailies:	Kenora	1,754			Fort William Port Arthur	13,316

- c Controlled Distribution
- x Printed in Summer Only

n.a. Not Available

Source: Canadian Advertising, Fourth Quarter, 1953

#### RETAIL TRADE

Retail trade is a sensitive indicator of economic conditions and a measure of our standard of living. As such it is interesting to study its course over a number of years. An accompanying table sets forth the dollar sales figures from 1930 to 1952 and it may be noted that at no time since 1938 has there been a decrease in the series. By taking into account changing prices, however, one obtains a somewhat different picture. The "real" figures give some indication of the changing volume of retail goods sold. To allow for population changes the per capita figures have also been worked out both on the dollar and on the "real" basis, with the latter series indexed in order to facilitate study of the changes. This index stood at 156.2 in 1952 (1935-39 = 100). In other words, people in Ontario to-day buy, on the average, well over 50 per cent. more goods at the retail level than they did just before the war. In regard to the per capita dollar sales figure, which was 921 in 1952, the increase since the 1935-39 period was 236 per cent. while the increase in total retail sales over the same period was 339 per cent. In general terms, both value and volume of sales are higher in total and in relation to population.

Another interesting approach to the study of retail sales is that of comparing total sales with total disposable personal income. The percentages have been estimated for the years 1930 to 1952 and are set out below.

### PERCENTAGE RATIO OF RETAIL TRADE TO ESTIMATED DISPOSABLE PERSONAL INCOME

1930	62.4	1942	52.3
1931	62.3	1943	47.7
1932	64.1	1944	49.3
1933	64.4	1945	51.9
1934	65.4	1946	61.2
1935	64.5	1947	72.5
1936	65.8	1948	71.4
1937	66.4	1949	70.5
1938	63.4	1950	73.6
1939	61.3	1951	72.7
1940	60.4	1952	72.2
1941	59.3		

Since 1947 retail sales have been roughly 70 per cent. of disposable income. However, one cannot say from this that people have been spending 70 per cent. of their income on retail goods since part of these expenditures may represent outlays delayed by wartime restrictions and made out of savings. It is obvious, though, that the ratio of retail expenditures to disposable income has been higher in the last few years than it was in the 1930's.

The distribution of retail sales between types of stores, as determined for 1951 by the census, shows that the highest proportion of the total went to the food and beverage group and the second highest proportion to the automotive group.

### RETAIL TRADE IN ONTARIO BY TYPES OF STORES, 1951

	Volume of Sales \$'000	Per cent. of Total Sales
Food and beverages	1,265,225	30.8
General merchandise	540,330	13.1
Automotive	1,006,452	24.5
Apparel and accessories	321,642	7.8
Building materials and hardware	261,948	6.4
Furniture, appliances, radio		
and home furnishings	180,491	4.4
Drugs and health appliances	113,470	2.8
Second hand	7,822	0.2
Other retail stores	416,812	10.1
TOTAL(1)	41,114,191	100.0

(1) Because of rounding, figures may not add to totals.

It is rather striking that sales by stores in the automotive group so greatly exceed sales of any other group except food and beverages. The importance of the automotive industry to the economy of Ontario is obvious.

The geographical distribution of retail sales will, it is hoped, be of interest but should be used with caution. The figures may be used as an indication of regional selling, of course, but should not be used as an accurate indication of regional buying since buying is by no means confined to municipal or county boundaries or even to boundaries of the larger areas referred to in this book as "Economic Regions". For example, Forest Hill, a suburb of Toronto, is characterized by higher than average incomes but the retail sales per capita figure is very low, the reason being that a great deal of buying by residents is done in stores located outside of the municipality. Other suburban communities in Ontario are in similar positions.

The figures for numbers of stores and sales per store are set forth below for three censuses:

	1930	1941	1951
Number of retail stores	43,045	47,055	50,117
Sales per retail store	\$25,554	\$29,901	\$82,092

When the 1951 sales-per-store figure is "deflated" by the retail price index the increase in the ten year period is smaller but still quite impressive. In terms of 1941 dollars the 1951 figure is \$43,974, indicating that the average retail store sold, in volume, a little less than 50 per cent. more goods than it did ten years earlier. This percentage increase is roughly the same as that mentioned above with regard to retail sales per capita.

In order to facilitate a comparison of the rate of growth of retail sales with that of population in Ontario, a graph has been included with this article. This graph shows the results of plotting, on a semi-logarithmic scale, three series: population, retail sales, and "deflated" or "real" sales. It will be noted that retail sales in terms of dollars have risen since 1943 at a more or less constant rate (since the line representing retail sales is relatively straight for the period 1943-1952). On the other hand, the line representing "deflated" or "real" sales is straight from 1943 to 1947, then drops, and subsequently advances from 1948 to 1952 at a much slower pace, indicating that the rate of growth in this series was constant for a shorter period than in the dollar retail sales series, i.e. most of the post-war gains in volume of goods sold were made by 1947. An examination of the index of "real" retail sales per capita corroborates this statement.

At the time of writing, retail sales figures are available for only eleven months of 1953. The incomplete information available seems to indicate an increase in dollar sales of about five per cent. for 1953 over 1952.

## RETAIL SALES, POPULATION, AND RETAIL SALES PER CAPITA IN ONTARIO BY REGIONS AND COUNTIES FOR 1951

	Retail Sales  1951 (\$'000)	Population 1951 (June 2)	Retail Sales Per Capita 1951
Region l - Metropolitan	1,355,723	1,276,298	1,062
Halton	34,239	44,003	778
Peel	33,374	55,673	599
York	1,288,100	1,176,622	1,095
Region 2 - Burlington	315,740	338,940	932
Brant	61,909	72,857	850
Wentworth	353,831	266,083	954
Region 3 - Niagara	189,920	212,599	893
Lincoln	79,774	89,366	893
Welland	110,146	123,233	894
Region 4 - Lake Erie	53,544	66,846	801
Haldimand	21,139	24,138	876
Norfolk	32,405	42,708	759
Region 5 - Upper Thames	247,447	276,475	895
Elgin	42,570	55,518	767
Middlesex	152,221	162,139	939
Oxford	52,656	58,818	895
Region 6 - Border	264,651	296,278	<u>893</u>
Essex	189,764	217,150	874
Kent	74,887	79,128	946
Region 7 - St. Clair River	59,014	74,960	787
Lambton	59,014	74,960	787
Region 8 - Upper Grand River	218,893	245,637	891
Perth	46,679	52,584	888
Waterloo	116,784	126,123	926
Wellington	55,429	66,930	828
Region 9 - Blue Water	206,452	270,599	76 <u>3</u>
Bruce	28,397	41,311	687
Dufferin	9,791	14,566	672
Grey	41,970	58,960	712
Huron	35,930	49,280	729
Simcoe	90,366	106,482	849
Region 10 - Kawartha	187,982	238,601	788
Durham	20,295	30,115	674
Ontario	72,271	87,088	830
Peterborough	50,957	60,789	838
Victoria	24,015	27,127	885
Northumberland	20,443	33,482	611
Region 11 - Quinte	140,992	178,500	790
Frontenac	51,371	66,099	777
Hastings	63,386	74,298	853
Lennox and Addington	13,356	19,544	683
Prince Edward	12,879	18,559	694

	Retail Sales 1951	Population 1951	Retail Sales Per Capita 1951
	(\$'000)	(June 2)	\$
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville Leeds Sormont	101,784	137,854	738
	13,594	15,818	859
	7,627	17,702	431
	11,002	17,045	645
	31,473	38,831	811
	38,088	48,458	786
Region 13 - Ottawa Valley	318,526	387,807	821
Carleton	222,460	242,247	918
Lanark	29,084	35,601	817
Prescott	14,280	25,576	558
Renfrew	46,207	66,717	693
Russell	6,496	17,666	368
Region 14 - Highlands	83,448	110,271	757
Haliburton	4,712	7,670	614
Muskoka	21,872	24,713	885
Nipissing	41,153	50,517	815
Parry Sound	15,711	27,371	574
Region 15 - Clay Belt	95,273	133,866	712
Cochrane	59,391	83,850	708
Timiskaming	35,882	50,016	717
Region 16 - Nickel Range	92,691	120,804	767
Manitoulin	5,819	11,214	519
Sudbury	86,872	109,590	793
Region 17 - Sault	50,252	64,496	779
Algoma	50,252	64,496	779
Region 18 - Lakehead	131,860	166,711	791
Kenora	28,617	39,212	730
Rainy River	17,175	22,132	776
Thunder Bay	86,068	105,367	817
TOTAL	4,114,191	4,597,542	895

Source of Original Figures: Dominion Bureau of Statistics, 1951 Census of Canada.

## RETAIL SALES, POPULATION, AND RETAIL SALES PER CAPITA IN URBAN CENTRES OF ONTARIO OVER 5,000 POPULATION FOR 1951

	Retail Sales 1951 (\$'000)	Population 1951 (June 2)	Retail Sales Per Capita 1951
Barrie Belleville Bowmanville Brampton Brantford Brockville Burlington	24,782	12,514	1,980
	26,692	19,519	1,367
	5,339	5,430	983
	10,985	8,389	1,309
	48,653	36,727	1,325
	16,785	12,301	1,365
	7,558	6,017	1,256
Chatham	37,200	21,218	1,753
Cobourg	7,721	7,470	1,034
Collingwood	9,926	7,413	1,339
Cornwall	25,728	16,899	1,522
Dundas	8,266	6,846	1,207
Eastview	7,379	13,799	535
Forest Hill	9,498	15,305	. 621
Fort Erie	8,080	7,572	1,067
Fort Frances	9,899	8,038	1,232
Fort William	31,468	34,947	900
Galt	20,326	19,207	1,058
Guelph	31,906	27,386	1,165
Hamilton	228,349	208,321	1,096
Hawkesbury	7,795	7,194	1,084
Ingersoll	. 8,550	6,524	1,311
Kenora	10,867	8,695	1,250
Kingston	43,976	33,459	1,314
Kitchener	56,314	44,867	1,255
Leamington	13,130	6,950	1,889
Leaside	14,997	16,233	924
Lindsay	16,090	9,603	1,676
London	125,682	95,343	1,318
Long Branch	8,934	8,727	1,024
Midland	8,297	7,206	1,151
Mimico	5,055	11,342	446
Newmarket	6,831	5,356	1,275
New Toronto	18,123	11,194	1,619
Niagara Falls	38,775	22,874	1,695
North Bay	26,494	17,944	1,476
Oakville	11,304	6,910	1,636
Orillia	17,761	12,110	1,467
Oshawa	46,735	41,545	1,125
Ottawa	207,575	202,045	1,027
Owen Sound	20,720	16,423	1,262

	Retail Sales 	Population 1951 (June 2)	Retail Sales Per Capita 1951 \$
Paris Parry Sound Pembroke Perth Peterborough Port Arthur Port Colborne Port Hope Preston	5,568 8,012 15,740 6,389 43,115 36,004 10,083 8,233 7,394	5,249 5,183 12,704 5,034 38,272 31,161 8,275 6,548 7,619	1,061 1,546 1,239 1,269 1,127 1,155 1,218 1,257
Renfrew	9,850	7,360	1,338
Riverside	2,800	9,214	304
Sarnia Sault Ste. Marie Simcoe Smith's Falls Stratford St. Catharines St. Thomas Sudbury Swansea	37,225 36,547 16,071 12,812 23,409 56,910 24,886 59,531 7,020	34,697 32,452 7,269 8,441 18,785 37,984 18,173 42,410 8,072	1,073 1,126 2,211 1,518 1,246 1,498 1,369 1,404
Thorold Tilsonburg Timmins Toronto Trenton	5,234	6,397	818
	12,002	5,330	2,252
	26,253	27,743	946
	1,000,910	675,754	1,481
	12,367	10,085	1,226
Wallaceburg Waterloo Welland Weston Whitby Windsor Woodstock	8,384	7,688	1,091
	9,931	11,991	828
	24,693	15,382	1,605
	14,029	8,677	1,617
	5,992	7,267	825
	130,475	120,049	1,087
	19,455	15,544	1,252

Source of Original Figures: Dominion Bureau of Statistics, 1951 Census of Canada.

## RETAIL TRADE IN ONTARIO BY COUNTIES AND REGIONS 1930, 1941, and 1951

	1 9 5	Dis-	1 9 4	Dis-	1 9 3	Dis-
Region	Sales	tribu-	<u>Sales</u>	tribu-	<u>Sales</u>	tribu-
	\$1000	tion	\$'000	tion	<u>\$'000</u>	tion
Metropolitan	1,355,723	33.0	464,761	33.0	413,086	37.6
Halton	34,239	0.8	8,072	0.6	5,757	0.5
Peel	33,374	0.8	8,459	0.6	5,985	0.5
York	1,288,110	31.3	448,230	31.9	401,344	36.5
Burlington	315,740	7.7	114,641	8.1	89,329	8.1
Brant	61,909	1.5	20,791	1.5	16,824	1.5
Wentworth	253,831	6.2	93,850	6.7	72,505	6.6
Niagara	189,920	4.6	67,200	4.8	47,941	
Lincoln	79,774	1.9	27,284	1.9	18,776	
Welland	110,146	2.7	39,916	2.8	29,165	
Lake Erie	53,544	1.3	15,384	1.1	11,254	1.0
Haldimand	21,139	0.8	6,336	0.5	4,519	0.4
Norfolk	32,405	0.5	9,048	0.6	6,735	0.6
Upper Thames	247,447	6.0	79,584	5.7	65,500	6.0
Elgin	42,570	1.0	14,506	1.0	10,826	1.0
Middlesex	152,221	3.7	47,286	3.4	41,564	3.8
Oxford	52,656	1.3	17,792	1.3	13,110	1.2
Border	264,651	6.4	90,632	6.4	65,562	6.4
Essex	189,764	4.6	67,051	4.8	48,292	4.7
Kent	74,887	1.8	23,581	1.7	17,270	1.7
St. Clair River Lambton	59,014 59,014	1.4	16,349 16,349	1.2	12,849	1.6 1.6
Upper Grand River	218,893	5.3	71,017	5.1	56,217	5.3
Perth	46,679	1.1	15,181	1.1	13,428	1.1
Waterloo	116,784	2.8	36,665	2.6	27,655	2.7
Wellington	55,429	1.4	19,171	1.4	15,134	1.5
Blue Water Bruce Dufferin Grey Huron Simcoe	206,452	5.0	63,387	4.5	47,560	4.3
	28,397	0.7	9,437	0.7	7,418	0.7
	9,791	0.2	3,288	0.2	2,627	0.2
	41,970	1.0	13,789	1.0	10,937	1.0
	35,930	0.9	10,522	0.8	7,613	0.7
	90,366	2.2	26,351	1.9	18,965	1.7
Kawartha Durham Ontario Peterborough Victoria Northumberland	187,982 20,295 72,271 50,957 24,015 20,443	4.6 0.5 1.8 1.2 0.6 0.5	60,344 6,293 23,410 16,981 7,055 6,605	4.3 0.5 1.7 1.2 0.5	42,577 4,821 13,541 13,004 5,970 5,241	3.9 0.4 1.2 1.2 0.5 0.5
Quinte Frontenac Hastings Lennox and Addingt Prince Edward	140,992 51,371 63,386 on 13,356 12,879	3.4 1.2 1.5 0.3	48,845 19,447 21,282 4,007 4,109	3.5 1.4 1.5 0.3	34,494 14,224 14,568 3,402 2,300	3.1 1.3 1.3 0.3 0.2

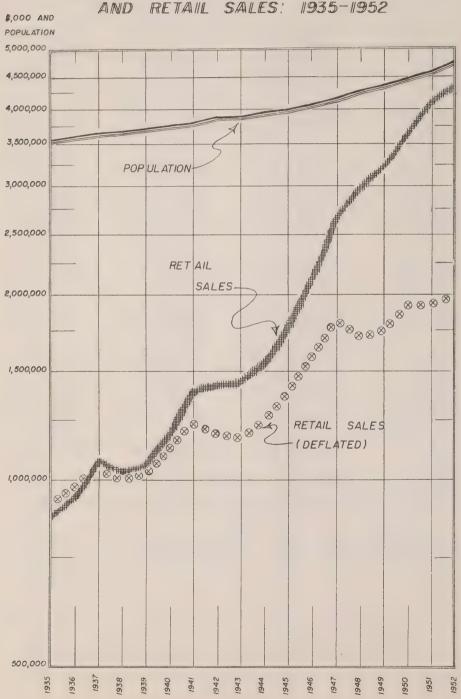
Region	1 9 5 Sales \$ 7000	l Dis- tribu- tion	Sales \$'000	l Dis- tribu- tion	Sales \$1000	Dis- tribu- tion
Upper St. Lawrence	101,784	2.5	33,949	2.4	24,775	2.3
Dundas	13,594	0.3	4,408	0.3	2,804	0.3
Glengarry	7,627	0.2	2,939	0.2	2,019	0.2
Grenville	11,002	0.3	3,885	0.3	3,698	0.3
Leeds	31,473	0.8	11,696	0.8	9,375	0.9
Stormont	38,088	0.9	11,021	0.8	6,879	0.6
Ottawa Valley Carleton Lanark Prescott Renfrew Russell	318,526 222,460 29,084 14,280 46,207 6,496	7.7 5.4 0.7 0.4 1.1	115,979 88,157 8,715 4,107 12,561 2,439	8.2 6.3 0.6 0.3 0.9	84,299 63,905 7,367 2,755 8,495 1,777	7.7 5.8 0.7 0.3 0.8 0.2
Highlands	83,448	2.0	27,131	1.9	19,124	1.7
Haliburton	4,712	0.1	1,007	0.1	532	0.1
Muskoka	21,872	0.5	7,021	0.5	4,829	0.4
Nipissing	41,153	1.0	11,456	0.8	9,522	0.9
Parry Sound	15,711	0.4	7,647	0.5	4,241	0.4
Clay Belt	95,273	2.3	43,174	3.1	24,552	2.2
Cochrane	59,391	1.4	26,422	1.9	14,813	1.4
Timiskaming	35,882	0.9	16,752	1.2	9,739	0.9
Nickel Range	92,691	2.3	30,537	2.2	17,185	1.6
Manitoulin	5,819	0.1	1,814	0.1	1,421	0.1
Sudbury	86,872	2.1	28,723	2.0	15,764	1.4
Sault Algoma	50,252 50,252	1.2	16,335 16,335	1.2	13,199 13,199	1.2
Lakehead	131,860	3.2	47,730	3.4	30,492	2.8
Kenora(1)	28,617	0.7	8,264	0.6	4,923	0.5
Rainy River	17,175	0.4	4,673	0.3	3,804	0.4
Thunder Bay(1)	86,068	2.1	34,793	2.5	21,765	2.0
TOTAL	4,114,191	100.0	1,406,977	100.0	1,099,990	100.0

Because of rounding figures may not add to totals or sub totals

<sup>(1)</sup> Patricia Portion included with Kenora in 1941 and 1951, and with Thunder Bay in 1930.

Source of Original Figures: Dominion Bureau of Statistics, Census of Canada - 1931, 1941, 1951.

## THE GROWTH OF POPULATION AND RETAIL SALES: 1935-1952



RETAIL SALES IN ONTARIO: 1930 - 1952

	Retail Sales (\$'000)	Retail Price Index (1935-39=10	"Real" Retail Sales (\$'000)	Retail Sales Per Capita	"Real" Retail Sales Per Capita	Index of "Real" Retail Sales Per Capita (1935-39=100)
1930 1931 1932 1933 1934 1935 1936 1937 1940 1941 1942 1944 1945 1944 1946 1947 1948 1948 1949 1950 1951	1,099,990 952,725 790,232 741,651 840,459 882,610 949,354 1,078,200 1,035,740 1,048,724 1,202,644 1,406,977 1,441,963 1,558,510 1,742,409 2,113,916 2,687,070 3,022,270 3,234,540 3,643,910 4,114,191 4,387,871	95.9 98.1 102.0 102.8 101.0 106.6 114.9 122.4 124.5 125.2 126.2 132.1 148.8 177.4 184.8 190.0 214.5 215.0	920,344 967,741 1,057,059 1,007,529 1,038,341 1,128,184 1,224,523 1,178,033 1,164,368 1,244,816 1,380,673 1,600,239 1,805,827 1,703,647 1,750,292 1,917,847 1,918,038 2,040,870	325 278 228 211 237 247 263 296 282 283 321 371 371 370 393 436 516 643 707 739 815 895 921,	257 268 291 274 280 301 323 303 297 314 345 391 432 399 400 429 417 428	93.8 97.8 106.2 100.0 102.2 109.9 117.9 110.6 108.4 114.6 125.9 142.7 157.7 145.6 146.0 156.6 152.2

Source of Original figures: Dominion Bureau of Statistics.

### WHOLESALE TRADE

The general wholesale price index for Canada showed a more or less continuous upward movement from 1939 to 1951. However, in August of 1951 the index started to decline. Towards the end of 1952 wholesale prices stabilized at a level about 120 per cent. higher than the 1935-39 average. The components of the wholesale group showed considerable variation in price changes. The movement of the "fully and chiefly manufactured" price index closely paralleled that of the general wholesale price index during the war and post-war years, although in the spring of 1952 the latter index fell off somewhat, and the two series began to diverge. The "industrial materials" group showed, after 1940, the largest price increases of the non-farm groups. In June of 1951, though, the "industrial materials" price index started to fall and continued to do so until it dropped below the "fully and chiefly manufactured" index in September of 1953. The "raw and partly manufactured" group showed general price advances during and after the war only a little less rapid than those of the two other non-farm categories. In mid-1951 the price index began to turn downward and continued to fall. In November of 1953, the "raw and partly manufactured", "fully and chiefly manufactured", and "industrial materials" price levels were about 103 per cent., 128 per cent., and 126 per cent. higher than their respective 1935-39 averages.

In the farm group, the total index has shown considerable fluctuation. The highest post-war annual average was achieved in 1951. In 1952 and 1953 the agricultural price index fell off rapidly, being in November of 1953, about 205 per cent. of the 1935-39 average. This position had been reached firstly by the falling off rapidly of animal product prices during the latter months of 1951 and the first part of 1952, which was only partly offset by rising field product prices and secondly by the decline of field product prices in the second half of 1952 and during 1953 (particularly during the late summer), which was not offset by any considerable change in animal product prices. In November of 1953, field product prices averaged about 52 per cent., and animal product prices about 158 per cent., higher than their 1935-39 averages. The wide divergence of the two farm product indexes was apparent during the early war years but during the latter part of the war and the immediate post-war period, the two came quite close together. In 1947 and 1948, though, animal product prices again moved ahead much more rapidly than field product prices, and the two indexes have remained far apart ever since.

Wholesale dollar sales in Ontario have shown a continuous upward trend since 1941. From that year until 1952 there was a 151 per cent. increase. It appears that volume sold at the wholesale level has, in the same period, advanced by about 30 per cent. Volume of sales was not as large in 1952 as it was in the first two post-war years, but it was somewhat higher than in the period 1948-1951.

## INDEXES OF GENERAL WHOLESALE SALES IN ONTARIO (1935-39 = 100)

I	)
Dollar Sales (1) Volume (2 <u>Index</u> Index	
1941     144.2     123.9       1942     157.4     128.0       1943     166.0     129.8       1944     183.6     140.6       1945     206.9     156.6       1946     245.9     177.0       1947     275.8     168.9       1948     287.7     148.8       1949     299.6     151.1       1950     315.8     149.5       1951     349.3     145.4       1952     362.2     160.3	

- (1) The Dominion Bureau of Statistics' General Index of Wholesale Sales for Ontario.
- (2) II is I "deflated" with the Dominion Bureau of Statistics General Wholesale Price Index for Canada.

### WHOLESALE SALES IN ONTARIO, 1951 COUNTIES AND REGIONS

Regions & Counties	Sales \$'000	% of Total	Regions & Counti	Sales Les \$'000	% of Total
Metropolitan Halton Peel York	2,702,473.4 5,393.5 5,859.8 2,691,220.1	61.7 0.1 0.1 61.4	Kawartha Durham Ontario Peterborough Victoria Northumberla	62,681.5 1,018.6 19,762.2 26,695.5 6,437.2 ad 8,768.0	1.4 - 0.5 0.6 0.1 0.2
Burlington Brant Wentworth	296,698.6 27,094.7 269,603.9	6.8 0.6 6.2	Quinte Frontenac Hastings	77,426.0 25,028.0 47,127.2	1.8 0.6 1.1
Niagara Lincoln Welland	71,345.1 36,280.7 35,064.4	1.6 0.8 0.8	Lennox and Addington Prince Edward	2,559.1 2,711.7	0.1
Lake Erie Haldimand Norfolk	13,765.1 4,961.5 8,803.6	0.3	Upper St. Lawre: Dundas Glengarry Grenville Leeds Stormont	34,306.2 2,897.8 3,133.3 5,168.8 10,948.5 12,157.8	0.8 0.1 0.1 0.2 0.3
Upper Thames Elgin Middlesex Oxford	184,635.6 20,710.2 149,393.9 14,531.5	4.2 0.5 3.4 0.3	Ottawa Valley Carleton Lanark Prescott Renfrew	243,247.7 213,877.2 8,768.7 2,242.3 14,938.5 3,421.0	5.6 4.9 0.2 0.1 0.3
Border Essex Kent	213,591.9 148,656.4 64,935.5	4.9 3.4 1.5	Russell Highlands Haliburton Muskoka	36,082.0 181.3 3,972.8 25,408.2	0.8
St. Clair River Lambton	27,873.5 27,873.5	0.6	Nipissing Parry Sound	6,519.7	0.1
Upper Grand River	82,513.6 16,855.9	1.9	Clay Belt Cochrane Timiskaming	62,348.3 31,968.4 30,379.9	1.4 0.7 0.7
Waterloo Wellington	49,158.7 16,499.0	0.4	Nickel Range Manitoulin Sudbury	56,163.2 2,259.2 53,904.0	1.3 0.1 1.2
Blue Water Bruce Dufferin	83,719.1 3,743.1 4,125.4	1.9 0.1 0.1	Sault Algoma	30,445.4	0.7
Grey Huron Simcoe	19,321.3 29,172.3 27,357.0	0.4 0.7 0.6	Lakehead Kenora Rainy River Thunder Bay	102,469.6 9,999.8 4,788.6 87,681.2	2.3 (0.2 0.1 2.0
			TOTAL	4,381,785.8	100.0

Source: Dominion Bureau of Statistics, Census of Canada, 1951.

## WHOLESALE TRADE IN ONTARIO NUMBERS OF ESTABLISHMENTS, TOTAL SALES, AND PAYROLLS

		TOTAL	SALES	PAY	ROLLS
	No. of Establish- ments	\$1000	% of Provincial Total	\$1000	% of Provincial Total
Wholesale proper	3,666	1,889,977.5	43.1	112,609.2	59.8
Petroleum tank stations	676	390,265.9	8.9	13,251.1	7.0
Assemblers of primary products	686	323,447.2	7.4	9,190.6	4.9
Manufacturers' sales branches and offices	909	1,367,220.5	31.2	43,352.5	23.0
Agents and brokers	486	353,853.1	8.1	6,723.0	3.6
Other types of operation	88	57,021.6	1.3	3,135.0	1.7
TOTAL	6,511	4,381,785.8	100.0	188,261.4	100.0

Source: Dominion Bureau of Statistics, 1951 Census of Canada.

### THE TOURIST INDUSTRY

The tourist industry involves a general shuffling around of people. Whether these people come to Ontario from outside the country, from other Canadian provinces, or just move about within the Province, they demand goods and services and stimulate the economy of the Province.

Ontario's big source of tourists is the United States. In 1953, 1,534,135 American cars, 6 per cent. of the total for Canada, were admitted through Ontario customs ports on travellers' vehicle permits. This does not include commercial or local vehicles or repeat commuters' trips. Approximately 36,000 of these were commuters and local residents. In addition, an estimated 56,000 American automobiles entered Ontario after first passing through other Canadian provinces. This makes a total of about 1.6 million vehicles. Only four per cent. of the cars entering Ontario from the United States left Canada by other provinces.

At the rate of three (1) persons per car, the average for this category for Canada as a whole, this means that nearly five million (2) Americans spent some time in Ontario in 1953. But this includes only tourists travelling by car. In 1953, 717,637 non-resident passengers entered Ontario from the United States by rail, boat, bus, and airplane. This does not include local bus traffic between border communities, but it does include people travelling for reasons other than pleasure. At any rate, it is safe to assume that the number of American vacationers entering the Province in a year is well over the total population of Ontario.

The number of vehicles entering Ontario on travellers' vehicle permits is increasing yearly. An increase of 12.6 per cent. took place in this category between 1952 and 1953. At the same time, there was a decrease of 1.6 per cent. in the number of entrants to Ontario from the United States by common carrier.

The average length of stay per car travelling in Canada on a travellers' vehicle permit in 1952 was 4.62 days (3). Fifty-six per cent. stayed for two days or less; 40 per cent. from three to fourteen days. Approximately half of the total American travel expenditures in Canada in 1952 were made in Ontario. The average expenditure per car travelling in Ontario on permit was approximately \$42 (4). Average expenditure per car for American summer residents in Canada was about \$322. By the two classes, therefore, an estimated \$61 million was spent in Ontario in 1952.

The Ontario Department of Travel and Publicity estimates a figure considerably higher than this, which has been computed from Dominion Bureau of Statistics information. According to a mail survey of a sample of visitors to Ontario Government Reception Centres, an estimated total of \$220 million was spent in Ontario by United States motor car visitors entering on travellers' vehicle permits in 1952. This is nearly three times the Dominion Bureau of Statistics figure, which may be low because of underestimated expenditures by short-term visitors. American visitors pay duty on purchases made while in Canada for vists of less than forty-eight hours.

Calculated at the average expenditure per passenger entering Canada by rail, bus, boat, and plane, an additional \$50 million was spent by travellers from the United States in Ontario. Including this amount, the Ontario Department of Travel and Publicity estimates an expenditure of over \$270 million by American tourists in Ontario during 1952.

<sup>(1)</sup> The Ontario Department of Travel and Publicity estimates an average of 3.5 persons per car entering Ontario.

<sup>(2)</sup> This does not include occupants of:

<sup>1)</sup> an estimated 36,000 vehicles of commuters and local residents entering Ontario on travellers' vehicle permits.

<sup>2) 4,127,205</sup> vehicles, including local vehicles restricted to travel within jurisdiction of the port of entry and for less than 48 hours, and vehicles re-entering as commuters.

<sup>3) 190,197</sup> commercial vehicles.

<sup>(3)</sup> Ontario Department of Travel and Publicity estimate for Ontario: 6.1 days.

<sup>(4)</sup> Ontario Department of Travel and Publicity estimate: \$167.

There has been a downward trend in average expenditure per car in the last four years, from a high of \$58 in 1949. This is partly a result of the large and increasing number of short-length visits of American motorists to Ontario. Motor traffic cutting across southern Ontario in forty-eight hours or less amounted to more than a quarter of all motor traffic entering the Province on permits in 1952. The average expenditure per car in Ontario is lower than the average for other provinces because of this factor.

In Canada as a whole, United States travellers by motor vehicle (not including occupants of commercial vehicles), rail, boat, bus, and plane spent \$238 million in 1952. Although the number of visits to Canada by United States residents exceeded visits of Canadians to the United States by 22 per cent., expeditures by Canadians in the United States exceeded expenditures in Canada by nearly \$37 million, or 14 per cent. The difference was only 8 per cent. in 1953.

In 1953 there was accommodation in the Province for 193,000 visitors in licenced tourist establishments and outfitter's camps. In addition, there were 26,500 rooms in hotels which operate under a Provincial liquor license for a full or part year. There are no statistics for establishments of less than five rooms or for private homes which accommodate tourists.

According to a Dominion Bureau of Statistics report, the average number of paid employees of hotels in Ontario for 1952 was 20,722, with a total payroll of \$31 million, exclusive of "tips". These figures do not include establishments with less than six rooms, and employees do not include operators of family enterprises.

A few routes through southern Ontario account for a large proportion of American travellers. From June to September, 1952, 45.7 per cent. of the total travellers' vehicle permit automobiles entered by Fort Erie and Niagara Falls, and 60 per cent. of these returned the same way. A high proportion of this number is considered intransit traffic, with 36 per cent. remaining in Canada for less than one day. Twenty-nine per cent. of the Fort Erie-Niagara Falls entrants returned by St. Clair and Detroit River ports. Vehicles entering through St. Clair and Detroit River ports in this period made up 36 per cent. of the total, with 40 per cent. of these returning via Fort Erie and Niagara Falls. Another popular route was that between Fort Erie-Niagara Falls and the St. Lawrence River ports, with tourist traffic moving in both directions.

Of 2,103,531 visitors to Ontario Government Tourist Reception Centres during the four years 1949 to 1952, 1,760,053 stated a specific destination. Of these, 57 per cent. were headed for southwestern Ontario, 11 per cent. for central Ontario, 9 per cent. for northwestern Ontario, 7 per cent. for southeastern Ontario, and 6 per cent. for northern Ontario. Ten per cent. intended to go beyond the Province for their vacation.

The Regions in which the tourist industry is most prominent are the Highlands, Blue Water, Kawartha, Quinte, and Niagara. The success of these Regions as tourist areas depends on scenic attractions and facilities for recreation, accessibility to heavily populated areas, and the extent to which the tourist industry can complement other economic activity carried on in the area.

Seventy per cent. of the total tourist accommodation in the Province is in the five Regions named. There is accommodation for nearly 21,500 visitors at tourist establishments in Muskoka District alone, and for almost as many in Simcoe County. Many tourist establishments operate only from May to October, and some in July and August only, but most of these provide their operators with sufficient income to support them for the whole year.

In the Highlands, the tourist industry is the dominant economic activity, directly providing employment for a large number of people during the tourist season, and supplementing income from the marginal type of farming carried on there. The Blue Water Region is the summer home of many residents from nearby southern Ontario towns and cities, as well as the location of commercial tourist establishments. The Region's dependence on tourism is not as complete as in the Highlands, however, as farming for the Toronto market provides a good return. In the Kawartha, Quinte, Niagara, and Ottawa Valley Regions, the tourist industry, although important, is subordinate to manufacturing and farming.

The tourist trade also affects other industries. These may be classified as primary holiday trades: the direct consumptive trades of entertainment and sports and personal services; and secondary holidary trades: building decorating and construction, gasoline, water and electricity, transportation and communication, and the distributive trades.

According to the Ontario Department of Travel and Publicity study, the average American motor party in Ontario on a vacation purchased 28.5 gallons of gasoline, with revenue to service stations of over \$16 million in 1952. From this amount, an estimated \$4.3 million went directly to the Provincial Treasury in gasoline taxes. The proportion of other products consumed by the tourist is difficult to measure.

PRINCIPAL STATISTICS FOR HOTELS CLASSIFIED BY NATURE OF OPERATIONS - ONTARIO - 1952 -

	Total All Hotels	Full Year Licenced Hotels	Full Year Non-licenced Hotels	Seasonal Licenced Hotels	Seasonal Non-licenced Hotels
Number of hotels Number of rooms, total in hotels in cabins	1,489 46,459 37,225 9,234	811 26,786 26,000 786	171 3,945 3,478 467	49 1,818 1,039 779	458 13,910 6,708 7,202
Percentage of room occupancy	% 61	63	51	5 <sup>1</sup> 4	58
Bed capacity	86,366	46,137	6,977	3,645	29,607
Average number of paid employees	20,722	14,942	826	1,015	3,939
Salaries & Wages \$'	000 31,131	28,343	834	582	1,372
Total operating receipts \$'	000 125,488	112,493	4,014	2,268	6,713
meals	% 23.4 % 20.1 % 47.2 % 9.3	21.2 17.8 52.3 8.7	43.9 41.2 14.9	32.1 31.8 21.1 14.9	43.5 42.6 - 13.8
Operating expenses \$	000 114,212	102,462	3,655	2,112	5,983

Hotels: Establishments with six or more rooms providing lodging or lodging and meals for transient guests.

Full Year Hotels: Establishments operated for at least ten months in the year.

Source: Dominion Bureau of Statistics, Hotels, 1952.

### TOURIST ACCOMMODATION IN ONTARIO

- 1953 -

	No. of Hotel Rooms as %	In Outfitters'	Establishments
Region 1 - Metropolitan Halton Peel York	18.1 0.5 17.6	-	5.0 0.5 0.7 3.8
Region 2 - Burlington Brant Wentworth	4.5 1.1 3.4	-	1.2 0.3 0.9
Region 3 - Niagara Lincoln Welland	6.7 2.3 4.4	-	6.9 1.1 5.8
Region 4 - Lake Erie Haldimand Norfolk	1.3 0.6 0.7	- -	1.4 0.3 1.1
Region 5 - Upper Thames Elgin Middlesex Oxford	5.3 1.3 3.0 1.0	-	2.3 0.8 0.8 0.7
Region 6 - Border Essex Kent	6.1 3.8 2.3	-	3.0 2.1 0.9
Region 7 - St. Clair River Lambton	1.4		2.3
Region 8 - Upper Grand River Perth Waterloo Wellington	4.9 0.6 2.9 1.4	- - -	0.7 0.3 0.2 0.2
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	2.6 1.0 0.1 0.3 -	- - - -	19.6 3.7 0.2 1.0 0.7 14.0
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	3.3 0.4 1.1 1.0 0.3 0.5		13.2 1.0 1.1 3.9 4.0 3.2
Region ll - Quinte Frontenac Hastings Lennox and Addington Prince Edward	3.7 1.3 1.8 0.1 0.5	-	8.6 3.6 2.7 1.1 1.2
Region 12 - Upper St. Lawrence Dundas Glengarry Grenville	3.3 0.2 0.1 0.4	-	4.9 0.5 0.2 0.3

	No. of Hotel	In Outfitters' Camps as % of	Caracity Accommodation in Tourist Establishments as % of Province
Leeds Stormont	1,6 1.0	Ξ.	3.3 0.6
Region 13 - Ottawa Valley Carleton Lanark Prescott Renfrew Russell	9.5 6.1 0.4 0.7 1.7 0.6	1.8	5.4 1.2 1.1 0.1 2.9 0.1
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	8.1 0.1 4.2 2.6 1.2	37.9 - 17.6 20.3	21.8 4.4 14.1 1.3 2.0
Region 15 - Clay Belt Cochrane Timiskaming	5.7 5.5 0.2	4.5 1.6 2.9	0.5 0.2 0.3
Region 16 - Nickel Range Manitoulin Sudbury	3.8 0.1 3.7	14.3 7.0 7.3	0.7 0.4 0.3
Region 17 - Sault Algoma	2.2	8.3 8.3	0.7
Region 18 - Lakehead Kenora(2) Rainy River Thunder Bay	9.5 2.4 1.5 5.6	33.2 23.4 6.2 3.6	1.8 0.9 0.1 0.8
TOTAL	100.0	100.0	100.0

<sup>(1)</sup> Includes only hotels which operate under a Provincial liquor license for a full or part year.

Source: Ontario Department of Travel and Publicity.

<sup>(2)</sup> Patricia Portion included in Kenora.

## FOREIGN VEHICLES ENTERING CANADA ON TRAVELLERS' VEHICLE PERMITS THROUGH CNTARIO PORTS OF ENTRY. - 1953 -

Region 3 - Niagara Fort Erie Niagara Falls	700,055 351,260 348,795	Region 11 - Quinte Kingston	1,390 1,390
Region 6 - Border Kingsville Leamington Pelee Island Windsor	415,434 236 241 520 414,437	Region 12 - Upper St. Lawrence Morrisburg Prescott Brockville Lansdowne Cornwall	129,811 1,751 13,469 1,938 93,932 18,721
Region 7 - St. Clair River Courtright Port Lambton	178,860 1,629 3,317	Region 17 - Sault Sault Ste. Marie	48,169 48,169
Sarnia Sombra Walpole Island	169,833 2,959 1,122	Region 18 - Lakehead Rainy River Fort Frances	60,402 1,899 36,049
Region 9 - Blue Water Midland	14 14	Pigeon River PROVINCE	22,454

Source: Diminion Bureau of Statistics, Travel Between Canada and the United States, December, 1953.

### FINANCE

### Banking

There are eleven chartered banks, with more than 3,800 branches and about nine million accounts, now operating in Canada. In 1951, there were 3,100 branches in Canada and about 1,100 in Ontario. The Bank of Canada was incorporated in 1934 and began operations in March, 1935.

The development of the branch system of banking has aided in the opening up of new sections of the country. Many areas would have lacked the resources and possibly the population to support a purely local bank. A branch bank, however, no matter how big or small it may be, has all the resources of the bank it represents standing behind it. It is also easier to maintain the required liquidity (1), when both assets and liabilities are spread over the whole country.

The composition of bank assets and liabilities has changed considerably over the past sixty years. In 1893, almost two-thirds of total bank assets consisted of loans to current business. To-day, this makes up less than one-half while federal and provincial government securities comprise almost one-third of the total (previously only one to two per cent.). The demand for bank loans in 1953 was largely in connection with inventory accumulation and consumer credit. Deposit accounts of Canadian banks now represent approximately 97 per cent. of their entire liabilities to the public compared with 80 per cent., in 1893. In that earlier year, bank notes in circulation accounted for about 15 per cent. of liabilities. Since then, however, the Canadian Government has gradually restricted the privilege of note circulation and now the only notes in circulation are those of the Bank of Canada.

The first clearing house in Canada was established in Montreal in 1888. The principal considerations in setting up new clearing houses are the growth of population and bank representation.

As the result of a study made by the Canadian Banker's Association in January, 1953, at which time it collected the grand total of all cheques cashed in Canada during that month (both in and out of clearing house centres), the number of clearing house centres throughout Canada was increased from thirty-five to fifty-two. In order to improve representation in Ontario, the number rose from fifteen to twenty-one. Cheques cashed in these twenty-one Ontario clearing houses in January 1953 (just over \$62 billion) represented 89 per cent. of all cheques in the Province during that month.

Generally, the activities of a clearing house do not extend beyond the municipal bounds of the centre in which it is situated. The following exceptions should be noted:

### Clearing House Areas of Activity

Cornwall Area known as Urban Area of the city and Township of

Cornwall

Kitchener and Waterloo

London City of London and Villages of Byron and Pottersburg

Chippewa

Toronto Area bounded by and including Clarkson, Cooksville, Malton,

Thornhill, Agincourt and Highland Creek

Ottawa City of Ottawa and Eastview and Clarkstown

Source: The Canadian Banker's Association.

<sup>(1)</sup> Chartered banks are required to maintain a reserve of not less than five per cent. of their deposit liabilities within Canada. These reserves must be in the form of deposits with, and notes of, the Bank of Canada.

### CHEQUES CASHED AGAINST INDIVIDUAL ACCOUNTS AT THE CLEARING HOUSE CENTRES IN ONTARIO, 1953

Region	\$1000	Region	\$'000
l - Metropolitan Toronto	42,579,170	7 - St. Clair River Sarnia	433,419
2 - Burlington Brantford Hamilton	522,688 3,409,586	8 - Upper Grand River Guelph Kitchener	280,724 765,741
3 - Niagara Niagara Falls St. Catherines	483,575 632,551	10 - Kawartha Oshawa Peterborough	1,279,364 365,075
5 - Upper Thames London	1,973,402	ll - Quinte Kingston	341,335
6 - Border Chatham Windsor	433,439 2,082,420	12 - Upper St. Lawrence Cornwall	200,421
13 - Ottawa Valley Ottawa	4,588,480	17 - Sault Sault Ste. Marie	485,198
15 - Clay Belt Timmins	156,161	18 - Thunder Bay Fort William Port Arthur	311,696 267,105
16 - Nickel Range Sudbury	434,357	TOTAL	62,025,907

## CHEQUES CASHED IN CLEARING HOUSES IN SELECTED YEARS ONTARIO

	\$'000
1926	11,998,344
1929	18,543,768
1932	11,258,872
1943	24,681,702
1951	47,046,956
1953	62,025,907

Source: Cheques Cashed in Clearing House Centres, December 1953,
Dominion Bureau of Statistics.

### Trust and Loan Corporations

The principal function of loan companies is to lend funds on first-mortgage security. This money which is thus made available for developmental purposes is raised mainly through the sale of debentures to the public and by savings-department deposits. There has been a redistribution over the past years in the various assets held by loan companies. The greatest change has occured in mortgage investments which increased during 1952 by \$12.3 million to a total of \$219,957,000. Mortgages in 1952 made up 73.7 per cent. of total assets compared with 72.4 per cent. in 1951 and 50.9 per cent. in 1946. At December 31, 1952, there were seven loan corporations registered in Ontario with total assets of \$295,755,000, an increase of 4.1 per cent. over the previous year.

Trust companies act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys to manage the estates of the living, as guardians of minor or incapable

persons, as financial agents for municipalities and companies and as authorized trustees in bankruptcy. Trust companies also receive deposits for investment but the investment and lending of both deposit and trust funds, are restricted by law. There were twenty-four trust companies registered in Ontario at December 31, 1952, with assets totalling \$4.1 billion. About ninety per cent. of total assets were in estates, trusts and agency funds.

Mortgage principal owing to loan and trust companies at the end of 1952 amounted to \$20.9 million on farm and \$327.2 million on urban property for a total of \$348.1 million gross book value.

The combined public riability of loan and trust companies (debentures payable by loan companies, guaranteed investment receipts issued by trust companies, and deposits held by both) increased in 1952 by \$30.5 million to a total cf \$583.7 million.

### CHIEF OFFICES OF TRUST AND LOAN COMPANIES ONTARIO, 1952

	Trust Companies	Loan Companies
Region 1 - Metropolitan	15	14
Region 5 - Upper Thames	1	2
Region 7 - St. Clair River	2	1
Region 8 - Upper Grand River	2	-
Region 10 - Kawartha	1	
Region 12 - Upper St. Lawrence	1	-
Region 13 - Ottawa Valley	2	
TOTAL	24	7

Source: Extracts from Loan and Trust Corporations' Annual Statements December 31, 1952.

### Savings Institutions

There are three types of savings institutions in Ontario, in addition to the savings departments of chartered banks and trust and loan corporations. First there is the Post Office Savings Bank where all deposits are the direct obligation of the Government of Canada. Second is the Province of Ontario Savings Office where the depositor is a direct creditor of the Province. As of March 31, 1952, there were 100,000 depositors in twenty-two branches. Third are the cooperative credit unions. In Ontario, contrary to the rest of Canada, this movement has developed mostly among wage earners in industrial centres. Credit unions are chartered and inspected by the Province. In 1950 there were 491 chartered credit unions with 144,871 members in Ontario, and 2,965 with 1,036,175 members in Canada.

#### Insurance

Most insurance companies operate under Federal Government registration, although some have only provincial licenses. In the division of business between the two, most is transacted by companies with federal government registration.

As of December 31, 1951, there were fifty-nine companies licensed to write life insurance in Ontario. At that time, insurance in force in the Province amounted to \$8,346 million, an increase of \$782 million over 1950. In Canada, there was \$18.2 billion in force at the end of 1951. The average amount of new policies written in Ontario increased from \$1,018 in 1941 to \$2,861 in 1950, and \$3,054 in 1951.

The amount of fire insurance in force in Canada at the end of 1951, was approximately \$36.8 billion. Uninsured property losses in that year made up 25 per cent. of total losses. In Ontario, property losses amounted to \$23.2 million, while uninsured losses made up 22 per cent. of this total.



### INCOME AND PRICES

Personal income in Ontario was \$6,714,000,000 in 1952. This was the highest figure of any Province. Allowing for the size of the population, Ontario still surpassed its sister Provinces. Provincial personal income per capita figures are presented below for comparative purposes.

-----1952-----

	Personal Income \$'000,000	Population 1000	Personal Income per Capita
Canada	17,703	14,430	1,227
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	233 71 558 402 4,056 6,714 914 1,182 1,251	374 103 653 . 526 4,174 4,766 798 843 970 1,198	623 689 855 764 972 1,409 1,145 1,402 1,290

It is interesting to note how constant and direct has been the relationship between changes in the total personal income of this Province and changes in the national total. Over a considerable period of time personal income in Ontario has represented about two-fifths of the Canadian total. The following table illustrates the relationship.

	Personal Income in Ontario \$'000,000	Personal Income in Canada \$'000,000	Ontario as % of Canada %
1926 1933 1939 1942 1946 1947 1948 1949 1950 1951	1,569 1,187 1,766 3,002 3,821 4,068 4,608 4,953 5,306 6,166 6,714	4,092 2,843 4,320 7,475 9,761 10,390 11,943 12,757 13,414 15,711	38.3 41.8 40.9 40.2 39.1 39.2 38.6 38.8 39.6 39.2 39.3

Information is not available for Ontario on the annual amounts of personal saving and the relationship between saving and the level of personal disposable income. However, such information is available on a national basis and is presented below.

1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951	Personal Saving in Canada \$1000,000 304 409 547 1,466 1,751 1,977 1,619 988 426 1,009 1,005 645 1,386 1,419 1,546	Personal Disposable Income in Canada \$1000,000   4,208   4,808   5,600   6,980   7,478   8,164   8,430   8,965   9,599   11,121   11,968   12,674   14,683   15,753   16,581	Saving as % of Personal Disposable Income % 7.2 8.5 9.8 21.0 23.4 24.2 19.2 11.0 4.4 9.1 8.4 5.1 9.4 9.0 9.3
1953	1,546	10,501	9.3

### (1) Preliminary

There are included in this section a number of tables containing information on the intra-Provincial geographical distribution of personal income. Census data on incomes of wage-earners and wage earner families are presented by Regions and by selected urban centres. Information relating to declared incomes of taxpayers is also shown by Regions and centres. With regard to the latter it should be recognized that the statistics presented relate only to the incomes of persons earning sufficiently high annual returns to subject them to Dominion Income Tax. Additionally, this Bureau has prepared an estimated distribution of the Dominion Bureau of Statistics' 1951 personal income figure for Ontario. While it is possible that future study will result in refinement and modification of method, it is hoped that this estimate will furnish a useful approximation to the true distribution.

### ESTIMATED DISPOSABLE INCOME IN ONTARIO: 1941-1952

	Estimated Disposable Personal Income \$,000,000	Per Capita	Estimated "Real" Disposable Personal Income (1949 Dollars) \$,000,000	(1) Per Cap (1949 Dollars) \$	
1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951	2,374 2,759 3,039 3,164 3,357 3,455 3,704 4,230 4,590 4,951 5,662 6,080	627 710 776 798 839 844 887 989 1,048 1,107 1,231	1,652 1,968 2,255 2,360 2,518 2,678 3,141 4,103 4,590 5,095 6,438 7,083	436 518 576 595 629 659 752 959 1,048 1,139 1,400 1,487	100 119 132 136 144 150 172 220 240 261 321 341

<sup>(1)</sup> The Dominion Bureau of Statistics' Consumer Price Index has been used as a "deflator".

FREQUENCY DISTRIBUTION OF WAGE-EARNERS IN ONTARIO BY AMOUNT OF EARNINGS DURING TWELVE-MONTH PERIOD PRIOR TO JUNE 2, 1951;
COUNTIES AND REGIONS

Regions	Under \$500	\$500- \$999 \$	\$1,000- \$1,499	\$1,500- \$1,999	\$2,000- \$2,499	\$2,500- \$2,999	\$3,000- \$3,599	\$4,000	Median Earnings
Metropolitan	6.8	6.7	12.1	18.3	21.7	15.1	12.1	7.2	
Halton	10.1	7.8	11.9	16.1	21.0	13.2	10.8	9.1	
Peel	9.4	8.7	12.6	16.3	20.3	14.4	11.4	6.9	
York	6.6	6.6	12.1	18.4	21.9	15.1	12.2	7.1	
Burlington	8.1	6.6	11.8	15.8	22.1	18.0	13.1	4.5	2,170
Brant	9.0	8.0	13.1	16.7	24.8	15.9	9.2	3.3	2,060
Wentworth	7.9	6.3	11.5	15.5	21.5	18.4	14.1	4.8	2,200
Niagara	9.0	7.0	10.0	13.3	19.9	20.9	15.5	4.4	2,270
Lincoln	8.8	7.8	11.0	14.3	20.2	18.8	14.4	4.7	2,200
Welland	9.1	6.5	9.3	12.6	19.7	22.3	16.3	4.2	2,320
Lake Erie	15.5	16.1	19.6	18.7	17.7	6.8	4.0	1.6	1,470
Haldimand	11.8	11.3	16.6	21.5	23.7	8.8	4.7	1.6	1,740
Norfolk	17.4	18.6	21.1	17.3	14.5	5.8	3.7	1.6	1,330
Upper Thames	10.6	9.4	14.8	18.6	21.0	12.4	8.9	4.3	1,910
Elgin	13.4	12.9	16.4	16.7	16.7	10.2	9.2	4.5	1,720
Middlesex	9.5	7.9	13.8	18.7	21.7	13.6	9.9	4.9	2,020
Oxford	11.6	11.0	16.5	20.1	23.7	10.4	4.7	2.0	1,750
Border	9.0	7.4	10.4	13.4	21.0	20.8	13.3	\$.7	2,230
Essex	8.2	6.7	9.4	12.2	21.0	22.5	14.8	5.2	2,320
Kent	12.0	10.1	14.0	17.9	20.8	14.4	8.0	2.8	1,890
St. Clair R. Lambton	10.1	8.3	10.5	13.8	18.6 18.6	17.7 17.7	16.0 16.0	5.0 5.0	2,200
Upper Grand R. Perth Waterloo Wellington	10.0	8.8	15.3	19.6	23,3	13.3	6.6	3.1	1,910
	13.4	10.9	15.9	17.5	20.8	13.5	5.7	2.3	1,780
	8.4	7.6	15.0	20.2	24.2	14.3	6.9	3.4	1,970
	11.7	10.6	15.7	19.4	22.1	10.7	6.7	3.1	1,810
Blue Water Bruce Dufferin Grey Huron Simcoe	13.4 15.4 20.4 13.9 12.7	14.1 19.3 19.1 13.1 14.8 12.7	19.5 20.8 19.8 18.7 20.7	21.6 23.2 20.0 22.2 20.8 21.2	17.5 13.4 10.2 18.4 17.5 18.8	7·3 4·2 5·4 7·4 6·7 8·4	4.6 2.5 3.9 4.4 5.0 5.1	2.0 1.2 1.9 1.8 2.3	1,570 1,370 1,270 1,600 1,540
Kawartha Durham Ontario Peterborough Victoria Northumberland	10.0 10.8 7.9 9.5 13.6 15.8	9.6 11.1 7.8 8.0 14.5 14.5	12.5 13.1 10.5 11.8 19.4 15.6	16.7 15.9 14.0 17.3 22.0 21.9	19.8 20:0 18.6 22.6 16.0 19.4	15.8 15.9 19.2 16.8 7.1 7.3	12.5 10.8 18.2 10.5 5.7 3.8	3.1 2.4 3.8 3.5 1.7	2,030 1,970 2,260 2,080 1,560 1,590
Quinte Frontenac Hastings Lennox and	12.3	12.4	17.3	18.8	19.0	9.8	6.9	3.5	1,710
	12.3	10.7	16.0	18.6	20.0	11.1	7.2	4.1	1,800
	11.1	11.9	17.0	18.7	19.9	9.9	7.9	3.6	1,770
Addington Prince Edward	15.9 14.6	18.5	19.1 23.6	20.4	15.7 12.8	5.7 6.1	3·3 3·7	1.4	1,410

Region	Under \$500				\$2,000- \$2,499		\$3,000- \$3,999 %	. /	Median Earnings
Upper St. Lawrence	13.0	13.7	15.6	19.9	17.9	11.2	6.5	2.2	1,690
Dundas	19.0	18.7	19.6	21.4	12.7	4.3	3.0	1.3	1,310
Glengarry	21.2	26.4	21.6	15.6	8.9	3.5	2.1	0.7	1,060
Grenville	13.2	16.6	18.6	20.6	16.6	8.3	4.7	1.4	1,540
Leeds	12.6	14.3	16.6	19.5	18.9	9.4	6.0	2.7	1,670
Stormont	10.7	9.3	12.0	20.3	20.3	16.0	8.8	2.6	1,940
Ottawa Valley Carleton Lanark Prescott Renfrew Russell	9.1 7.9 12.4 13.8 11.3	10.1 8.3 14.9 17.3 13.9 17.2	15.1 13.1 18.1 19.0 21.2 24.9	19.9 19.1 20.8 18.1 22.6 24.5	18.7 19.8 16.6 11.5 16.8 12.0	10.7 11.9 7.3 12.5 7.0 3.9	9.5 11.1 7.1 6.8 4.8 1.8	6.9 8.8 2.8 1.0 2.4 0.5	1,890 2,040 1,610 1,500 1,580 1,350
Highlands	12.8	13.4	18.5	19.4	17.0	9.1	7.0	2.8	.1,640
Haliburton	14.0	16.8	22.5	25.0	14.9	3.8	2.3	0.7	1,430
Muskoka	13.4	15.3	23.3	22.6	13.5	5.3	4.9	1.7	1,460
Nipissing	11.0	10.9	15.5	17.2	19.0	12.3	9.7	4.4	1,870
Parry Sound	16.0	16.1	19.5	19.1	16.6	7.1	4.5	1.1	1,460
Clay Belt	9.2	9.1	11.4	14.6	23.0	16.6	11.8	4.3	2,120
Cochrane	8.5	8.7		14.4	22.8	16.2	12.9	4.6	2,140
Timiskaming	10.5	9.7		14.8	23.7	17.3	9.7	3.7	2,090
Nickel Range	7.8	7.6	9.8	11.3	15.6	20.4	22.6	4.9	2,430
Manitoulin	20.9	22.6	19.5	16.3	12.1	4.3	3.1	1.2	1,170
Sudbury	7.1	6.8	9.3	11.0	15.8	21.3	23.6	5.1	2,500
Sault Algoma	9.1 9.1	9.7 9.7	11.0	11.9	19.4	19.2 19.2	14.9 14.9	4.8	2,210 2,210
Lakehead	9.2	9.9	12.6	14.5	21.6	14.8	13.2	4.2	2,090
Kenora	10.5	10.5	12.1	15.2	20.5	13.6	13.5	4.1	2,040
Rainy River	11.3	11.1	'11.6	12.9	17.3	16.0	15.6	4.2	2,090
Thunder Bay	8.5	9.5	13.0	14.6	22.6	14.8	12.7	4.3	2,100
Total	8,9	8.5	13.1	<u>17.3</u>	20.7	14.9	11.4	5.2	2,050

Source of Original Figures: Dominion Bureau of Statistics, Ottawa: 1951 Census of Canada.

FREQUENCY DISTRIBUTION OF WAGE-EARNERS IN ONTARIO BY AMOUNT OF EARNINGS DURING TWELVE-MONTH PERIOD PRIOR TO JUNE 2, 1951;
CENTRES OVER 5,000 POPULATION

Region	Under \$500	\$500- \$999	\$1,000- \$1,499	\$1,500- \$1,999	\$2,000- \$2,499	\$2,500- \$2,999	\$3,000- \$3,999 %	\$4,000	Median Earnings
Metropolitan Brampton Forest Hill Leaside Long Branch Mimico Newmarket New Toronto Oakville Swansea Toronto Weston	8.7 10.9 7.2 6.6 4.1 8.3 6.5 7.3 6.4 6.8 5.5	8.3 16.1 3.7 6.2 5.4 7.8 5.2 6.1 5.0 7.1 4.6	13.7 8.6 5.8 10.2 8.7 13.3 9.3 11.2 8.7 13.7	15.7 10.4 11.5 15.5 20.8 16.0 14.7 14.9 20.4	24.0 9.7 13.1 21.4 20.2 27.4 20.9 20.5 17.6 23.1 19.9	14.5 8.6 11.3 17.7 20.3 11.2 20.9 13.7 15.6 14.1 17.2	10.6 9.6 19.1 16.9 17.6 7.3 17.6 12.5 15.3 9.8 17.5	4.5 26.1 28.3 5.5 8.2 3.9 3.6 14.0 16.5 5.0	2,080 2,210 2,880 2,270 2,400 2,000 2,310 2,260 2,430
Burlington Brantford Burlington Dundas Hamilton Paris	8.7 10.0 7.0 7.5 7.6	7.2 5.2 6.3 6.2 8.7	12.8 10.5 11.7 11.5 13.9	16.6 12.4 15.7 15.8 22.3	25.1 16.0 18.6 21.8 24.0	16.5 14.6 19.0 18.7 13.8	9.8 16.0 16.7 13.9	3.3 15.3 5.0 4.6 2.9	
Niagara Fort Erie Niagara Falls Port Colbourne St. Catharines Thorold Welland	7.0 10.8 8.4 6.4 9.3 4.8	6.6 7.4 7.2 6.2 6.6 3.6	9.1 11.2 7.8 9.7 8.3 9.0	11.0 13.1 11.0 14.0 11.9	20.4 19.2 16.0 20.3 19.8 20.2	22.5 18.5 25.1 21.2 22.0 25.5	18.4 15.2 20.1 16.0 17.4 16.5	5.0 4.6 4.4 6.2 4.7 5.3	2,400 2,200 2,490 2,340 2,350 2,430
Lake Erie Simcoe	13.2	10.5	15.6	19.4	20.5	9.9	7.1	3.8	1,780
Upper Thames Ingersoll London St. Thomas Tillsonburg Woodstock	6.7 8.5 9.3 8.8 9.6	6.2 6.8 8.2 9.3 7.5	13.5 13.7 13.1 19.0 15.2	18.4 19.0 15.8 19.2 22.1	32.1 22.2 17.7 22.7 24.5	15.2 14.2 13.9 11.3 12.2	5.6 . 10.5 14.4 7.0 6.0	2.3 5.1 7.6 2.7 2.9	2,080 2,050 2,100 1,840 1,900
Border Chatham Leamington Riverside Wallaceburg Windsor	9.6 11.8 4.3 10.1 7.5	7.9 9.6 4.3 7.0 6.1	11.8 16.2 6.0 9.4 8.8	16.3 21.9 8.6 16.6 11.9	20.6 22.5 18.4 21.2 20.7	18.2 9.8 25.4 21.6 23.4	11.0 6.2 19.7 11.3 16.0	4.6 1.8 13.3 2.8 5.6	2,110 1,780 2,670 2,160 2,380
St. Clair R. Sarnia	8.3	6.2	8.7	12.8	17.8	20.2	19.7	6.3	2,390
Upper Grand R. Galt Guelph Kitchener Preston Stratford Waterloo	6.8 8.8 7.8 7.4 8.6 7.4	6.3 8.0 6.8 5.8 6.2 6.3	19.1 15.5 15.6 14.5 13.2 12.6	20.0 20.2 19.9 21.2 16.4 20.0	26.3 25.3 23.2 26.1 24.0 25.4	15.4 11.4 15.2 14.9 20.5 14.8	7.3 7.2 7.6 7.4 7.8 8.6	3.8 3.6 3.9 2.7 3.3 4.9	2,170 1,940 2,000 2,020 2,020 2,120 2,070

Region	Under \$500	\$500- \$999 %	\$1,000- \$1,499	\$1,500- \$1,999	\$2,000- \$2,499	\$2,500- \$2,999	\$3,000- \$3,999	\$4,000	Median Earnings
Blue Water Barrie Collingwood Midland Orillia Owen Sound	8.9 10.0 13.2 9.8 11.3	7.4 12.4 10.9 8.4 9.0	13.6 14.5 18.7 18.5 17.7	20.1 22.1 19.3 23.5 21.4	20.7 25.6 19.1 22.0 20.4	14.2 8.7 10.0 8.9 10.4	10.8 4.3 6.3 5.6 6.7	4.3 2.4 2.5 3.3 3.1	2,000 1,800 1,690 1,780
Kawartha Bowmanville Cobourg Lindsay Oshawa Peterborough Port Hope Whitby	8.4 10.6 8.6 6.3 8.4 9.1 4.8	6.5 10.1 10.3 5.5 5.9 7.9 8.8	10.1 13.6 17.5 8.5 10.6 11.5	12.0 20.9 22.7 12.1 17.4 16.7 19.5	21.3 24.1 20.3 18.2 23.0 22.5 21.3	24.0 11.8 9.3 22.0 18.6 16.8 18.0	15.1 5.7 8.4 23.1 12.1 11.4 11.4	2.6 3.2 2.9 4.3 4.0 4.1 3.1	2,310 1,880 1,800 2,480 2,170 2,100 2,090
Quinte Belleville Kingston Trenton	10.7 11.5 9.0	9.2 8.9 9.9	14.0 15.3 13.7	17.0 18.9 20.0	19.9 20.2 25.6	12.6 11.8 9.8	11.1 8.2 8.6	5.5 5.1 3.4	1,970 1,880 1,940
Upper St. Lawrence Brockville Cornwall	8.9	9.0 8.0	15.5	18.2 19.3	22.1	13.4	8.7 9.9	4.2 3.7	1,960 1,980
Ottawa Valley Eastview Hawkesbury Ottawa Pembroke Perth Renfrew Smiths Falls	4.8 7.9 7.7 11.3 8.6 11.5 8.9	6.9 10.8 7.9 12.0 15.4 11.7 9.6	14.2 14.9 12.8 19.3 21.7 19.0	23.2 16.9 18.9 26.4 25.6 25.6	21.6 13.5 20.1 19.1 16.4 20.2 20.6	12.7 23.0 12.1 6.8 4.4 5.9 13.2	10.9 11.8 11.4 3.7 5.1 4.1 15.2	5.9 1.2 9.1 1.4 2.8 2.0 5.8	2,020 1,090 2,070 1,640 1,580 1,650 2,120
Highlands North Bay Parry Sound	9.6 14.4	7.5 13.8	12.4	15.4 16.7	20.0	14.5	13.6 7.3	7.0 1.6	2,130 1,740
Clay Belt Timmins	9.6	7.4	9.8	12.7	26.7	17.9	12.6	3.3	2,200
Nickel Range Sudbury	7.0	6.2	9.0	10.4	17.7	23.9	21.3	4.5	2,490
Sault Sault Ste. Mari	e 7.1	6.9	8.3	9.5	20.1	24.0	18.1	6.0	2,450
Lakehead Fort Frances Fort William Kenora Port Arthur	9.1 7.2 7.7 8.8	9.4 7.8 8.2 8.9	10.4 12.3 10.3 11.6	12.4 14.6 13.5 14.4	18.7 24.0 21.5 24.1	18.9 16.1 13.7 15.9	15.9 13.6 17.9 12.0	5.2 4.4 7.2 4.3	2,230 2,170 2,240 2.130

Source of Original Figures: Dominion Bureau of Statistics, Ottawa: 1951 Census of Canada.

# FREQUENCY DISTRIBUTION OF WAGE-EARNER FAMILIES BY EARNINGS OF HEAD OF FAMILY DURING TWELVE-MONTH PERIOD PRIOR TO JUNE 2, 1951 COUNTIES AND REGIONS

Region	Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,499	\$2,500- \$2,999	\$3,000- \$3,999	\$4,000- \$5,999	\$6,000	Median Earnings
Metropolitan Halton Peel York	4.3 5.3 5.9 4.2	14.9 17.0 17.4 14.8	24.8	22.4 19.8 21.1 22.5	20.3 17.2 18.6 20.5	9.0 9.8 7.9 9.0	4.3 6.1 4.1 4.2	2,570 2,540
Burlington Brant Wentworth	4.3 4.6 4.2	14.1 16.8 13.5	26.0 33.1 24.2	26.6 24.6 27.0	21.2 15.1 22.8	6.0 4.1 6.4	1.8 1.7 1.9	2,610 2,430 2,650
Niagara Lincoln Welland	4.8 5.4 4.5	12.9 15.0 11.5	22.8	29.0 26.7 30.5	23.8 22.3 24.8	5·7 5·9 5·5	1.6 1.9 1.4	
Lake Erie Haldimand Norfolk	14.5 9.3 17.5	37.5 33.3 39.9	26.6 32.8 23.1	11.3 13.9 9.8	7.2 7.9 6.7	2.3 2.4 2.3	0.6 0.4 0.7	1,950 2,110 1,810
Upper Thames Elgin Middlesex Oxford	6.4 9.7 5.2 7.5	22.4 26.7 19.1 29.6	28.4 23.2 28.2 34.0	19.9 16.5 21.6 17.1	15.0 15.9 16.8 8.0	6.1 7.2 6.8 2.8	1.8 0.8 2.3 1.0	2,370 2,290 2,460 2,190
Border Essex Kent	4.9 4.1 7.7	14.4 11.8 24.7	23.0	28.6 30.4 21.9	20.5 22.2 13.6	6.0 6.5 3.7	1.8 2.0 1.2	/
St. Clair River Lambton	5.9 5.9	15.0 15.0		24.8	25.3 25.3	6.7	1.4	2,670 2,670
Upper Grand River Perth Waterloo Wellington	8.1	21.8 25.0 19.8 24.8	32.5 30.2 33.5 31.7	22.4 22.4 24.0 18.2	11.9 9.9 12.4 12.0	4.3 3.5 4.4 4.6	1.6 0.9 1.9 1.4	2,350 2,280 2,390 2,280
Blue Water Bruce Dufferin Grey Huron Simcoe	12.1 15.9 21.1 11.3 12.5 10.7	37.3 47.6 41.0 37.4 36.3 34.8	26.9 22.6 17.7 28.0 27.9 27.8	12.1 7.1 9.9 12.2 11.2	7.9 4.3 7.8 7.6 8.4 8.7	3.0 1.9 2.3 2.8 3.2 3.4	0.7 0.6 0.2 0.7 0.5 0.9	2,000 1,720 1,700 2,020 2,020 2,080
Kawartha Durham Ontario Peterborough Victoria Northumberland	7.3 9.0 5.3 5.7 12.1 13.6	20.3 20.9 14.1 17.3 39.0 37.3	23.9 25.1 19.9 27.6 24.1 28.5	23.1 23.5 26.2 26.0 11.5 11.4	20.0 17.5 28.0 17.3 10.0 6.2	4.4 3.1 5.3 4.8 2.7 2.5	1.0 0.9 1.2 1.3 0.6 0.5	2,700 2,490 1,970
Quinte Frontenac Hastings	10.0 8.1 9.1	29.6 26.4 28.0		15.3 17.3 15.6	11.5 12.2 12.8	5.0 5.8 5.2	1.3 1.7 1.1	
Lennox and Addington Prince Edward	18.8 15.8	41.6 43.2	23.0 20.6	8.7 10.4	5.5 6.6	1.9	0.5	1,750 1,790

Region		\$1,000- \$1,999 %	\$2,000- \$2,499		\$3,000- \$3,999 \$		\$6,000	Melian Earnings
Upper St. Lawrence Dundas Glengarry Grenville Leeds Stormont	11.3 20.6 29.6 13.1 11.3 6.5	29.5 42.7 45.3 37.7 31.4 21.2	25.8 20.6 13.9 25.3 27.3	18.4 7.8 5.9 13.9 14.9 25.7	11.1 5.7 3.9 7.7 10.2 14.6	3.0 2.2 1.4 1.8 3.7 3.3	0.9 0.4 - 0.5 1.2 1.0	2,180 1,690 1,450 1,980 2,130 2,400
Ottawa Valley Carleton Lanark Prescott Renfrew Russell	6.2 4.5 9.8 13.1 9.3 17.9	26.5 21.1 36.4 36.8 41.4 53.3	23.4 23.0 24.9 16.4 25.9	15.4 16.7 12.0 20.6 11.0 6.2	15.7 18.4 12.0 11.5 8.0 2.5	9.5 12.0 4.3 1.3 3.6 0.6	3·3 4·3 0·6 0·3 0·8 0·2	2,370 2,540 2,080 2,000 1,980 1,600
Highlands Haliburton Muskoka Nipissing Parry Sound	11.6 16.7 15.5 7.4 15.3	36.1 53.0 47.5 25.6 41.8	22.7 20.3 18.6 24.6 23.6	13.7 5.7 7.8 19.1 10.7	11.2 3.1 7.6 15.9 6.9	3.9 1.1 2.7 6.1 1.4	0.8 0.1 0.3 1.3 0.3	2,050 1,630 1,730 2,350 1,830
Clay Belt Cochrane Timiskaming	5.6 5.0 6.8	16.3 15.8 17.3	28.1 27.1 29.5	24.1 23.6 25.0	18.6 20.6 15.1	5.6 6.1 4.8	1.7 1.8 1.5	2,500 2,540 2,440
Nickel Range Manitoulin Sudbury	5.0 31.3 3.7	11.0 38.2 9.7	15.6 17.7 15.5	25.7 6.1 26.7	34.4 4.6 35.7	7.0 1.7 7.3	1.3 0.4 1.4	2,860 1,490 2,900
Sault Algoma	4.7	13.1 13.1	22.8	27.0 27.0	24.0 24.0	7.1 7.1	1.3	2,670 2,670
Lakehead Kenora Rainy River Thunder Bay	5.7 6.6 8.1 5.1	17.2 17.5 18.3 16.9	27.1 26.0 22.2 28.0	21.0 20.0 21.5 21.3	21.4 22.2 23.1 20.9	6.3 6.6 6.1 6.3	1.3 1.1 0.7 1.5	2,500 2,500 2,530 2,500
Total	5.8	18.9	25.2	22.1	18.7	6.8	2.5	2,500

Source of Original Figures: Dominion Bureau of Statistics, Ottawa: 1951 Census of Canada

# FREQUENCY DISTRIBUTION OF WAGE-EARNER FAMILIES BY EARNINGS OF HEAD OF FAMILY DURING TWELVE-MONTH PERIOD PRIOR TO JUNE 2, 1951 URBAN CENTRES OVER 5,000 POPULATION

	fr a .	h1 000	40.000	40		41	16	
Region	\$1,000	\$1,000-	\$2,000- \$2,499 %	\$2,500~	\$3,000 <b>-</b> \$3,999	<b>\$</b> 4,000 <b>- \$</b> 5,999	+	
	%	%	%	%	96	%	76	\$
Metropolitan Brampton Forest Hill Leaside Long Branch Mimico Newmarket New Toronto Oakville Swansea Toronto Weston	6.1 5.6 2.1 3.0 3.2 4.1 3.2 3.7 3.2 5.0 2.7	15.1 5.1 4.8 11.8 7.9 20.8 9.1 12.6 8.0 18.1 8.5	30.5 8.4 9.1 24.3 19.8 38.6 21.7 20.2 15.4 27.9 18.6	21.6 9.9 12.8 25.5 27.4 17.9 29.6 19.0 21.3 22.0 22.6	18.5 15.4 27.3 26.4 28.1 11.7 29.2 19.6 23.8 17.1 28.4	6.5 21.0 29.9 7.5 10.4 5.3 6.4 14.4 18.8 6.6	1.7 34.6 14.0 1.5 3.2 1.6 0.8 10.5 9.5 3.3 3.2	2,850 2,330 2,770 .2,860 3,090 2,480
Burlington Brantford Burlington Dundas Hamilton Paris	4.0 2.3 2.9 3.9 4.1	15.3 10.2 13.5 13.1 21.0	33.0 16.8 20.4 24.4 35.8	25.8 20.5 28.3 27.7 21.9	16.0 24.6 26.7 22.8 11.8	4.1 17.7 6.3 6.3 3.7	1.8 7.9 1.9 1.8	2,660
Niagara Fort Erie Niagara Falls Port Colbourne St. Catharines Thorold Welland	4.4 5.0 3.5 3.4 4.1 2.1	9.7 12.3 8.0 10.9 9.8 9.0	22.1 22.1 17.3 21.4 20.2 19.9	29.4 27.6 33.5 29.2 30.9 34.2	26.9 24.9 30.5 24.5 26.7 25.9	6.4 6.5 5.7 7.6 6.6 6.4	1.1 1.6 1.5 3.0 1.7 2.5	2,820 2,740 2,760
Lake Erie Simcoe	8.9	26.C	30.1	15.2	12.8	5.7	1.3	2,250
Upper Thames Ingersoll London St. Thomas Tillsonburg Woodstock	3.9 4.2 5.1 5.2 4.5	16.9 17.1 17.6 29.8 26.6	42.0 28.6 21.9 32.3 33.5	24.1 22.6 20.5 16.8 19.9	9.1 17.9 22.7 11.1 10.2	3.5 7.3 11.2 4.4 3.6	0.5 2.3 1.0 0.4 1.7	, ,
Border Chatham Leamington Riverside Wallaceburg Windsor	3.9 8.3 1.4 4.1 3.4	15.9 31.2 4.1 14.9 9.6	25.2 31.8 16.4 26.4 21.6	27.9 15.2 31.1 30.2 31.4	18.9 10.5 27.3 19.5 24.5	6.3 2.5 13.5 3.8 7.2	1.9 0.5 6.2 1.1 2.3	
St. Clair River Sarnia	3.4	10.0	18.4	27.4	30.8	8.1	1.9	2,830
Upper Grand River Galt Guelph Kitchener Preston Stratford Waterloo	3.2 4.7 3.1 2.8 3.4 3.3	19.4 21.3 17.8 19.0 16.4	34.6 34.8 31.7 35.8 31.1 33.9	24.1 19.3 25.9 23.6 31.0 23.7	12.0 12.8 13.9 13.9 12.3 15.2	4.9 5.3 5.3 3.9 4.6 5.4	1.8 1.8 2.3 1.0 1.2	2,400 2,340 2,460 2,390 2,490 2,470

Region				\$2,500- \$2,999				Median Earnings
Blue Water Barrie Collingwood Midland Orillia Owen Sound	4.6 8.1 9.6 6.3 7.3	32.2 33.9 34.8	27.2 35.6 26.7 30.6 30.0	21.1 13.6 15.4 13.7 16.2	16.9 6.5 10.1 8.9 11.1	5.6 3.2 3.8 4.0 4.1	1.4 0.8 0.5 1.7	2,410 2,140 2,120 2,150 2,210
Kawartha Bowmanville Cobourg Lindsay Oshawa Peterborough Port Hope Whitby	5.0 6.0 5.2 2.9 3.6 5.1 4.6	25.3 31.2 8.4 13.4 16.5	24.7 34.2 29.5 16.8 27.0 28.8 25.7	33.5 19.5 14.4 29.2 29.0 24.8 25.8	23.1 9.3 14.4 35.2 20.0 18.3 18.2	3.8 5.0 4.2 6.1 5.5 4.9 4.1	0.6 0.7 1.1 1.4 1.5 1.6	2,660 2,270 2,230 2,880 2,600 2,490 2,480
Quinte Belleville Kingston Trenton	5.9 5.6 5.4	24.1	26.2 27.9 35.0	20.4 18.5 13.4	18.6 14.2 12.9	7·9 7·5 4·7	1.9 2.2 0.6	2,480 2,360 2,240
Upper St. Lawrence Brockville Cornwall	5.7 5.0		30.3 27.3	20.7	14.6 17.2	5.5 4.9	2.0	17.
Ottawa Valley Eastview Hawkesbury Ottawa Pembroke Perth Renfrew Smiths Falls	2.7 4.0 4.3 5.6 6.5 7.2 3.9	24.2 20.2 45.6 43.3 41.2	27.4 16.8 22.7 29.3 27.7 31.2 26.2	18.0 34.9 16.9 11.1 7.5 9.8 19.4	16.6 18.2 18.8 5.8 9.3 7.0 22.8	8.2 1.5 12.6 2.1 4.2 3.1 8.2	0.8 0.4 4.5 0.5 1.5 0.5	2,380 2,570 2,580 1,100 2,000 2,030 2,530
Highlands North Bay Parry Sound	4.0 8.2		23.7	21.7	21.7	9.6 2.4	2.1	2,620 2,200
Clay Belt Timmins	3.7	14.4	32.3	25.1	19.5	4.2	0.8	2,490
Nickel Range Sudbury	3.1	8.6	17.6	30.5	32.3	6.6	1.3	2,840
Sault Sault Ste. Mari	e 2.5	7.5	21.3	31.1	27.5	8.2	1.9	2,800
Lakehead Fort Frances Fort William Kenora Port Arthur	4.5 4.2 4.6 5.4	16.1	22.8 29.8 26.3 30.0	25.4 22.1 19.1 22.0	23.8 20.7 25.8 18.1	7.4 5.8 9.9 5.3	0.8 1.3 1.4 1.6	2,650 2,500 2,660 2,450

Source of Original Figures: Dominion Bureau of Statistics, Ottawa:
1951 Census of Canada

### TAXPAYERS AND INCOME OF TAXPAYERS, 1951 COUNTIES AND REGIONS

	Reported Income of Taxpayers \$'000	Income as a % of Total for Province	Number of Taxpayers	Taxpayers as % of Population of County or Region	Average Income Per
Region 1 - Metropolitan Halton Peel York	1,569,520 30,732 44,957 1,493,831	39.7 0.8 1.1 37.8	479,330 8,670 13,400 457,260	24.1 38.9	3,274 3,545 3,355 3,267
Region 2 - Burlington Brant Wentworth	369,342 61,121 308,221	9.3 1.5	116,460 20,090 96,370	34.4 27.6 36.2	3,171 3,042 3,198
Region 3 - Niagara	212,168	5.4	66,170	31.1	3,206
Lincoln	81,974	2.1	25,640	28.7	3,197
Welland	130,194	3.3	40,530	32.9	3,212
Region 4 - Lake Erie	30,650		9,750	14.6	3,144
Haldimand	11,147		3,760	15.6	2,965
Norfolk	19,503		5,990	14.0	3,256
Region 5 - Upper Thames	204,161	0.8	66,410	24.0	3,074
Elgin	31,303		9,930	17.9	3,152
Middlesex	138,840		44,950	27.7	3,089
Oxford	34,018		11,530	19.6	2,950
Region 6 - Border	246,805		77,960	26.3	3,166
Essex	200,295		63,100	29.1	3,174
Kent	46,510		14,860	18.8	3,130
Region 7 - St. Clair River	60,867	1.5	18,740	25.0	3,248
Lambton	60,867		18,740	25.0	3,248
Region 8 - Upper Grand Riv Perth Waterloo Wellington	185,401 25,697 121,164 38,540 87,716	4.7 0.6 3.1 1.0	63,530 8,780 41,430 13,320	16.7 32.8	2,918 2,927 2,925 2,893
Region 9 - Blue Water Bruce Dufferin Grey Huron Simcoe	87,716 12,079 3,355 19,663 11,602 41,017	0.3 0.1 0.5 0.3	31,310 4,160 1,270 7,220 4,270 14,390	11.6 10.1 8.7 12.2 8.7 13.5	2,802 2,904 2,642 2,723 2,881 2,850
Region 10 - Kawartha Durham Ontario Peterborough Victoria Northumberland	13,895 68,657 45,183		49,140 4,650 21,780 15,570 3,550 3,590	15.4 25.0 25.6	3,009 2,988 3,152 2,902 2,884 2,754
Region ll - Quinte	92,099	2.3	31,430	17.6	
Frontenac	41,340	1.0	13,780	20.8	
Hastings	42,103	1.1	14,220	19.1	
Lennox and Addington	4,967	0.1	1,770	9.1	
Prince Edward	4,689	0.1	1,660	8.9	

	Income of	Income as a % of Total for Province	of	Taxpayers as % of Population of County or Region	Average Income Per
Region 12 - Upper St. Lawres Dundas Glengarry Grenville Leeds Stormont	19,640 2,158 4,412 2,342 7,026 19,640 28,738	1.6 0.1 0.1 0.2 0.5 0.7	20,950 1,460 820 2,360 6,570 9,740	9.2 4.6 13.6 16.9	2,967 3,022 2,856 2,977 2,989 2,951
Region 13 - Ottawa Valley	264,969	6.7	85,120	21.9	3,113
Carleton	213,796	5.4	67,690	27.9	3,158
Lanark	16,199	0.4	5,420	15.2	2,989
Prescott	6,174	0.2	1,980	7.7	3,118
Renfrew	26,493	0.6	9,180	13.8	2,886
Russell	2,307	0.1	850	4.8	2,714
Region 14 - Highlands Haliburton Muskoka Nipissing Parry Sound	45,000 1,621 9,463 26,682 7,534	1.1 0.2 0.7 0.2	14,930 660 3,220 8,540 2,510	13.5 8.6 13.0 16.9 9.1	3,014 2,456 2,939 3,124 3,002
Region 15 - Clay Belt	87,551	2.2	27,880	20.8	3,140
Cochrane	59,678	1.5	18,840	22.5	3,168
Timiskaming	27,873	0.7	9,040	18.1	3,083
Region 16 - Nickel Range	100,981	2.6	31,630	26.2	3,193
Manitoulin	1,806	0.1	650	5.8	2,778
Sudbury	99,175	2.5	30,980	28.3	3,201
Region 17 - Sault	53,710	1.4	16,750	26.0	3,207
Algoma	53,710		16,750	26.0	3,207
Region 18 - Lakehead	128,921	3.3	42,470	25.5	3,036
Kenora	24,399	0.6	7,890	20.1	3,092
Rainy River	13,214	0.3	4,060	18.3	3,255
Thunder Bay	94,308	2.4	30,520	29.0	3,090
Total	3,954,180	100.0	1,249,960	27.2	3,163

Source of Original Figures: Department of National Revenue, Ottawa - Taxation Statistics, 1953.

### TAXPAYERS AND INCOME OF TAXPAYERS, 1951 SELECTED URBAN CENTRES

	Income of	Income as a % of Total for 'Province	of	of Urban	
Region 1 - Metropolitan Toronto	1,418,884	35.9	434,340	38.9	3,227
Region 2 - Burlington Brantford Hamilton	50,201 272,279		16,350 85,890	44.5 33.1	3,070 3,170
Region 3 - Niagara Niagara Falls St. Catharines Welland	46,220 56,326 31,509		14,400 17,420 9,520	63.0 45.8 61.9	3,210 3,233 3,310
Region 4 - Lake Erie					
Region 5 - Upper Thames London St. Thomas Woodstock	115,504 20,327 14,159	0.5	37,580 6,220 5,030	30.9 34.2 32.4	3,073 3,268 2,815
Region 6 - Border Chatham Windsor	20,419 159,667		6,620 50,270	31.2 31.9	3,084 3,176
Region 7 - St. Clair River Sarnia	38,901	1.0	11,910	33.7	3,220
Region 8 - Upper Grand River Galt Guelph Kitchener and Waterloo Stratford	21,159 26,691 68,657 15,651	0.7	7,270 9,240 22,760 5,180	37.9 33.7 40.0 27.6	2,910 2,889 3,017 3,021
Region 9 - Blue Water Barrie Orillia Owen Sound	10,157 7,975 11,385	0.2	3,270 2,800 4,050	26.1 23.1 24.7	3,106 2,848 2,811
Region 10 - Kawartha Oshawa Peterborough	47,817 37,539		14,800 12,810	35.6 33.5	3,231 2,930
Region 11 - Quinte Belleville Kingston Trenton	20,339 37,082 6,663	0.9	6,560 12,280 2,480	33.6 36.7 24.6	3,100 3,020 2,687
Region 12 - Upper St. Lawrence Brockville Cornwall	12,176 25,228		3,850 8,470	25.7 50.1	3,163 2,979
Region 13 - Ottawa Valley Ottawa Pembroke	205,57 <sup>1</sup> 8,940		64,780 3,030	23.0 23.9	3,173 2,950
Region 14 - Highlands North Bay	16,53	7 0.4	5,160	28.8	3,205

	Income of	Income as a % of Total for Province	Number	0 - 0 - 0 Occ.	Average
Region 15 - Clay Belt					
Kirkland Lake Timmins, Porcupine, and	10,959	0.3	3,580	-	3,061
Schumacher	30,210	0.8	9,900	-	3,052
Region 16 - Nickel Range Sudbury and Copper Cliff	59,302	1.5	18,450	39.8	3,214
Region 17 - Sault Sault Ste. Marie	43,637	1.1	13,500	41.6	3,232
Region 18 - Lakehead Fort William and Port Arthur	72,923	1.8	23,570	35.7	3,094
Total (Selected Urban Centres)	3,040,997	76.9	-	-	-
Provincial Total	3,954,180	100.0	· <u>-</u>	-	

Source of Original Figures: Department of National Revenue, Ottawa - Taxation Statistics, 1953.

# CONSUMER PRICE INDEXES, CANADA: 1939-1953 (1949-100)

	Total	Food	Shelter	Clothing	Household Operation	Other Commodities and Services
1939 1940 1941 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952	63.2 65.7 69.6 72.9 74.2 74.6 75.0 77.5 84.8 97.0 100.0 102.9 113.7 116.5 115.5	50.2 52.6 57.9 63.4 65.2 65.5 66.3 70.0 79.5 97.5 100.0 102.6 117.0 116.8 112.6	84.6 86.6 89.2 90.7 90.9 91.2 91.4 91.8 95.1 98.3 100.0 106.2 114.4 120.2 123.6	54.9 59.9 63.6 65.8 66.1 66.6 66.9 69.2 78.9 95.6 100.0 99.7 109.8 111.8	66.5 70.3 73.8 76.0 76.1 75.7 74.9 77.2 86.2 96.8 100.0 102.4 113.1 116.2	77.2 77.9 80.0 82.0 84.8 86.1 86.4 88.7 91.6 96.5 100.0 103.1 111.5 116.0 115.8
1952 Jan. 2 Feb. 1 Mar. 1 Apr. 1 May 1 June 2 July 2 Aug. 1 Sept. 2 Oct. 1 Nov. 1 Dec. 1	118.2 117.6 116.9 116.8 115.9 116.0 116.1 116.0 116.1 115.8	122.4 120.8 117.6 117.2 115.5 115.7 116.0 115.7 115.8 115.1 115.7	118.3 119.1 119.4 119.6 120.4 120.6 120.6 121.2 121.5 121.4 122.2	114.9 113.5 112.9 112.5 112.3 111.8 111.7 111.6 110.9 109.9 109.8 109.7	116.4 116.3 116.9 116.8 116.2 115.9 115.8 116.0 116.2 115.9 116.1	115.5 115.8 116.4 116.6 115.6 115.7 115.8 115.8 116.4 116.6
1953 Jan. 2 Feb. 2 Mar. 2 Apr. 1 May 1 June 1 July 2 Aug. 1 Sept. 1 Oct. 1 Nov. 2 Dec. 1	115.7 115.5 114.8 114.6 114.4 114.9 115.4 115.7 116.2 116.7 116.2	113.5 112.7 111.6 110.9 110.1 111.4 112.7 112.8 114.0 115.5 113.4 112.1	122.3 122.5 122.7 122.9 123.6 123.9 124.1 124.2 124.5 125.0 125.2	109.7 109.6 109.7 109.7 110.1 110.3 110.4 110.3 110.3	116.5 116.6 116.7 116.9 116.6 117.0 117.2 117.4 117.5 117.4	116.7 116.7 115.2 115.0 115.1 115.1 115.2 115.8 115.9 116.0 116.3

Source: Dominion Bureau of Statistics, Ottawa - Prices and Price Indexes.

CONSUMER PRICE INDEXES, TORONTO AND OTTAWA: 1949-1953 (1949=100)

	Total	Food	Shelter	Clothing	Household Operation	Other Commodities and Services
			TOR	ONTO		
1949 1950 1951 1952 1953	100.0 104.1 115.4 117.5 116.8	100.0 103.9 118.1 115.5 110.6	100.0 111.8 119.7 127.9 134.2	100.0 99.1 110.8 114.4 112.9	100.0 102.8 115.7 117.7 117.8	100.0 102.6 109.7 114.9 116.2
1953 Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	115.9 116.0 115.9 115.7 115.7 116.5 117.2 117.5 117.6 118.4 117.8	110.0 110.1 109.7 108.2 108.3 109.9 111.6 111.7 111.8 114.1 111.6 110.3	131.9 132.1 132.2 132.7 132.9 134.4 134.6 135.1 136.0 136.5 137.1	112.1 112.4 112.7 113.2 113.2 113.3 113.6 113.1 112.9 112.6	117.6 117.9 118.0 118.5 117.7 117.6 117.7 117.6 117.6 117.6	115.4 115.6 114.9 115.8 115.7 115.8 116.1 116.8 116.9 117.4
			<u>0 T I</u>	AWA		
1949 1950 1951 1952 1953	100.0 103.1 115.3 116.8 115.0	100.0 103.6 119.4 117.5 112.0	100.0 108.6 115.0 118.7	100.0 99.1 110.8 114.4 113.1	100.0 102.5 114.8 116.0 115.8	100.0 101.6 110.6 116.4 116.6
1953 Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	114.4 114.8 114.3 114.3 113.7 115.2 115.4 115.5 116.4 116.0	111.3 112.2 110.0 110.8 109.2 111.7 112.8 112.9 112.8 115.5 113.0 111.4	121.3 121.4 121.5 121.6 121.6 122.6 122.7 123.3 124.0 124.2 124.9	112.1 112.4 112.7 113.2 113.2 113.3 113.3 113.6 113.6 113.6	116.0 116.3 116.5 116.4 116.0 115.1 115.2 115.2 115.7 115.6 116.0	116.5 116.7 115.8 116.2 116.2 116.2 116.7 116.8 116.8 117.4

Source: Dominion Bureau of Statistics, Ottawa - Prices and Price Indexes.

### ESTIMATED DISTRIBUTION OF PERSONAL INCOME BY REGIONS - 1951

Region	Estimated Person	nal Income	Estimated Personal Income Per Capita
	φ 000,000	JO.	\$
1. Metropolitan	1,903.1	30.9	1,491
2. Burlington	496.7	8.1	1,465
3. Niagara	301.8	4.9	1,420
4. Lake Erie	83.5	1.4	1,249
5. Upper Thames	359.9	5.8	1,302
6. Border	396.8	6.4	1,339
7. St. Clair River	102.7	1.7	1,370
8. Upper Grand Rive	er 326.3	5.3	1,328
9. Blue Water	333.2	5.4	1,231
10. Kawartha	279.6	4.5	1,172
ll. Quinte	201.6	3.3	1,129
12. Upper St. Lawren	nce 143.5	2.3	1,041
13. Ottawa Valley	544.4	8.8	1,404
14. Highlands	93.9	1.5	. 852
15. Clay Belt	144.7	2.3	1,081
16. Nickel Range	171.8	2.8	1,422
17. Sault	80.3	1.3.	1,245
18. Lakehead (1)	202.2	3.3	1,213
PROVINCE	6,166.0	100.0	1,341
			and the state of t

<sup>(1)</sup> Including Kenora-Patricia Portion (James Bay)



### MUNICIPAL FINANCE

The annual Report of Municipal Statistics issued by the Department of Municipal Affairs lists the municipalities by class and population group in order of assessed population. In studying the economy of a region the financial position of the municipalities contained therein should be considered, and, since the data is not presented in the Report in a form convenient for this purpose, it has been rearranged. The municipalities of each county and district are arranged by type of municipality with those having an assessed population of 5,000 or more listed individually and the remainder totalled in two groups (assessed population of 2,000 to 4,999, and under 2,000). Totals are shown for the municipal units. Data is also given for the county units of government and adjustments made to eliminate duplications, thus producing a "net" figure for each county. County and district data have been combined on the basis adopted in the other sections of this survey and regional totals given.

The 1952 Annual Report of Municipal Statistics contains non-current figures for 73 municipalities whose 1952 audited statements were not available in time for inclusion in the Report. With the co-operation of the Department we have been able to supply 1952 figures for 71 of these municipalities leaving only the townships of Armstrong and Beckwith showing 1951 figures.

The tables show the assessed population, density of assessed population per acre, tax levy (total and per capita), debt (total and per capita), revenue by source (total and per capita), and expenditure by function (total and per capita). Assessment figures for land, buildings and business have not been shown because they are not comparable due to the variation in methods of assessment.

The "Debt" of a municipality includes the debenture debt, temporary loans and overdrafts shown in the Capital and Loan Fund Balance Sheet, the bank overdraft and temporary loans shown in the Revenue Fund Balance Sheet, less total assets of the sinking fund.

In order to present a net figure for revenue and expenditure for the year, debenture debt charges recoverable have been deducted from the expenditure, surplus or deficit from prior years has been eliminated, and where utilities and other enterprises show an amount taken into revenue and also a deficit, the net figure has been used. The revenue and expenditure of the county unit have been shown and adjustments have been made to eliminate duplications in items such as county rates and grants from the municipal governments to the count unit, and a final adjustment has been made to show a net county figure for utilities and other enterprises.

The information for 1950 which was given in the Fifth Annual Economic Survey, is shown on a slightly different basis. The adjustments for utilities and other enterprises and for county rates were made on the basis of the net figure for the Province as a whole instead of on the county basis, and no adjustment was made for grants of municipal governments to the county unit.

The summary statement by regional total and per capita figures, which appears on the following page, shows that tax levy per capita ranged from \$10.98 to \$72.80, with fifteen of the nineteen regions levying from \$40 to \$60. Revenue per capita figures have ranged between \$48.39 and \$86.24 and expenditure per capita from \$47.45 to \$85.15. With respect to revenue and expenditure, sixteen and fifteen regions respectively fell within a \$55 to \$75 bracket. The regions generally show little variation in standing in per capita figures in tax levy, revenue and expenditure, the notable exception being the Clay Belt Region which ranks sixteenth in tax levy and eleventh in revenue and expenditure. The James Bay Region shows the highest debt per capita (\$307.63) while the other Regions range from \$61.33 to \$166.23.

The table referred to above has been converted to an index based on 1950 (the only year for which comparable information is available). It will be noticed that the increase in assessed population has been exceeded in every other item, with the exception of debt per capita in the Border Region.

# MUNICIPAL FINANCE BY REGIONS 1952

diture	Per Capita	8, 66, 66, 76, 888775, 87, 888775, 888775, 888775, 888775, 888775, 887	7,186
Expenditure	Total \$1000	26,698 15,578 19,384 20,967 20,967 16,470 1,605 20,612 4,407 1,605 20,492 3,429 3,429 9,635	322,671
Revenue	Per Capita	8,627 1,588 th 1,588 th	7,264
Re	Total \$1000	26,652 15,646 15,646 19,507 10,109 10	326,141
bt	Per Capita	105.78 111,03 105.64 70.25 179.97 102.97 102.97 96.48 69.94 107.20 61.33 63.42 68.00 166.23	117.69
Debt	Total \$ 000	213, 780 23, 514 23, 514 21, 5	528,441
Tax Levy	Per Capita	7,07,288 6,57,77,288 7,77,79,898 7,77,79,898 7,77,79,898 7,78,49,784 7,980 10,0	5,857
Ta	Total \$1000	94, 450 22, 140 2, 987 16, 154 17, 755 13, 153 10, 905 10, 905	262,989
	Assessed	1,297,350 238,087 222,087 63,446 63,446 270,082 307,325 76,818 246,424 261,165 851 105,889 134,150 375,859 94,281 106,284 106,284 106,430 56,719	7,490,096
		Region 1 - Metropolitan Region 2 - Burlington Region 3 - Niagara Region 4 - Lake Erie Region 5 - Upper Thames Region 6 - Border Region 6 - Border Region 7 - St. Clair River Region 9 - Blue Water Region 10 - Kawartha Region 11 - Quinte Region 12 - Upper St. Lawrence Region 12 - Upper St. Lawrence Region 14 - Highlands Region 14 - Highlands Region 15 - Clay Belt Region 15 - Clay Belt Region 16 - Nickel Range Region 17 - Sault Region 17 - Sault Region 19 - James Bay (1)	TOTAL

(1) Improvement District of Balmertown, created Oct. 2, 1950.

# INDEX OF MUNICIPAL FINANCE 1952 (1950 = 100)

	(	75 	KATEA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-Deor	1 1 1 1	Revenue	EX	Expenditure
	Population	Total	Per Capita	Total	Per Capita	Total	Per Capita	Total	Per Capita
1 - Metropolitan	108.6	142.9	131.5	146.1	134.5	139.1	128.0	137.5	126.6
Burlington	107.5	152.3	141.8	154.8	144.1	142.9	132.9	143.7	133.7
Niagara	111.9	140.0	125.1	158.1	141.4	137.2	122.7	136.3	121.8
Lake Erie	103.2	132.2	128.0	137.5	133.3	131.9	127.1	132.6	127.6
- Upper Thames	104.3	136.7	131.0	208.6	199.9	134.1	128.5	134.1	128.5
- Border	107.3	134.0	124.9	112.0	104.4	130.3	121.5	130.0	121.2
St. Clair	114.5	145.7	127.2	180.0	157.1	143.2	124.5	141.5	123.0
Upper Grand River	104.7	134.4	128.4	151.0	144.2	131.2	125.4	132.4	126.5
Blue Water	102.7	125.0	121.8	154.4	150.3	126.4	122.6	125.4	121.7
Kawartha	106.6	138.1	129.6	165.4	155.1	136.6	125.5	135.1	124.1
Quinte	104.7	135.2	129.2	142.0	135.7	133.2	127.2	133.1	127.1
Upper St. Lawrence	102.5	130.4	127.2	133.3	130.1	122.4	119.4	121.1	118.3
13 - Ottawa Valley	104.2	129.0	123.8	148.2	142.3	131.0	125.6	124.1	118.9
14 - Highland	102.8	130.4	127.0	115.8	121.2	128.0	124.7	126.8	123.3
lay Belt	101.4	112.7	111.2	111.7	110.3	125.7	123.7	124.9	122.9
Nickel Range	106.6	138.2	129.7	166.4	156.2	146.1	137.0	142.0	133.1
Sault	116.0	144.2	124.3	187.1	161.3	140.5	121.2	137.5	118.5
Lakehead	107.4	135.0	125.8	121.3	113.0	131.4	122.3	129.3	120.4
19 - James Bay	1	ı	1	1	1	ı	ı	1	,

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density of	Ta	x Levy	Debi	t
	Assessed Population	Assessed Population per Acre		per Capita	Total	per Capita
Halton			т	т	4	Ψ
Towns Oakville	7,101	7.40	394	55.44	2,624	369.56
Burlington	6,709	10.53	331	49.37	1,575	234.76
2,000-4,999(3)	9,130	5.58	465	50.97	1,911	209.31
Village						
Bronte	1,109	3.33	34	30.45	5	4.51
Townships-Rural Nelson	8,404	0.18	2.1.2	37.21	663	78.85
Trafalgar	7,700	0.12	313 359	46.62	1,027	133.41
2,000-4,999(3)	6,051	0.05	211	34.79	201	33.18
Total Municipalities	45,204	0.20	2,107	45.58	8,006	173.27
County of Halton					478	10.36
Adjustments						
County Rates Grants-Municipalities						
to County						
NET TOTAL HALTON	46,204	0.20	2,107	45.58	8,7,84	183.63
		-				
Peel						
Towns	9 01.5	6.06	F(3	(0. ( (		2/0 =0
Brampton Villages -Port Credit	8,945 4,000	6.26 6.56	561 266	62.66	1,518 1,313	169.72
under 2,000(2)	2,077	2.29	90	43.25	190	328.30 91.25
Townships-Suburban				, 5 /		//
Toronto	30,000	0.43	1,665	55.51	4,002	133.40
Townships-Rural	E 001	0.00	2.00	0= 00	1.0	
Chinguacousy 2,000-4,999(2)	5,084 5,437	0.06	193	37.88	40 28	7.93
Toronto-Gore	727	0.05	34	47.06	(1)	5.13
Total Municipalities	56,270	0.19	3,051	54.21	7,091	126.03
County of Peel			-, -		368	6.53
Adjustments						
County Rates Grants-Municipalities						
to County						
NET TOTAL PEEL	56,270	0.19	3,051	54.21	7,459	132.56
York	***************************************					
City	((= 0()	00.00	== =	00	1 0	
Toronto Towns	667,364	29.89	59,347	88.93	104,487	156.57
Leaside	15,829	14.39	1,415	89.41	3,990	252.07
Mimico	11,975	25.59	562	46.94	1,065	88.96
New Toronto	11,236	26.13	851	75.71	3,661	325.80
Weston	8,256	13.27	618	74.81	2,757	333.91
Newmarket	5,749	a	271	47.16		149.35
Aurora Villages	3,554	3.32	150	42.09	1,102	310.10
Forest Hill	16,965	26.26	1,582	93.28	3,471	204.61
Long Branch	8,684	23.66	378	43.58	740	85.17
Swansea	8,250	22.73	460	55.70	912	110.59
Richmond Hill	3,140	2.16	138	43.81	790	251.55
under 2,000(4) Townships-Suburban	6,602	3.84	245	37.18	906	137.26
York	98,915	19.59	5,469	55.29	10,480	105.95
	, ,,-,		,,,,,	///	,,	/-//

### REVENUE 1952

Real Property and Business Tax	and	Licences and	-Revenue	Rates	Other	Total	per
\$ 1000	Subsidies \$'000	Permits \$'000	(Net) \$'000	( Net) \$'000	Revenue \$'000	\$ 1000	\$
394 326	52	6			23	475	66.93
465	3 <sup>1</sup> + 65	5 4	en en		10 8	375 542	55.91 59.36
3 <sup>1</sup> 4	2	2	w es		1	<b>3</b> 9	34.97
302	59	5.		10.70	16	382	45.40
347 209	47 _53	9	690 min		6 3	409 268	53.15
2,077	312	34	on on	277	67 21	2,490	53.88
40 M	153				Cala		
en ep	- 21+			- 277		- 277 - 24	
2,077	441	34			88	2,640	57.14
			grangente relationshifter appgeless, more referred at the				
559	65 20	15			35 16	674 304	75.30 76.01
265 89	5	3			14	109	52.62
1,572	316	36	ato -no	ug në	28	1,952	65.08
192	44	3			4	243	47.78
212 3 <sup>1</sup> 4	65 10	(1)			11	293 45	53.91 61.36
2,923	525	63	est est	499	109	3,620 999	64.33
	387	.1.	W 40		1111		
		60 40		- 499	40.00	- 499	
2,923	- 28 - 884	64	Alle des		221	4,092	72.72
<i>L</i> 9 <i>) L</i> 3							
59,281	5,214	633	659	100 100	4,245	70,032	104.94
1,372	86	10	32	age ***	74	1,574	99.44
562 851	26 65	6 17	2 89		13 33	1,055	93.91
618	58	7	6		54 60	7143 363	90.02
271 150	26 22	3	~ ~		5	180	50.54
1,580	71	12	no to		26	1,689	99.57
374	65	9 4	3		8 15	456 506	52.50 61.37
458 137	25 7	2	3 (1)		5 18	151	48.25
245	26	7	4			300	45.48
5,411	242	61	140		178	6,032	60.98

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans)

		Density-	Tax	Levy	Debt	
		of				
	Assessed	Assessed		per		per
	Population	Population	Total	Capita	Total.	Capita
		per Acre	\$1000	\$	\$1000	\$
,						
York (continued)						
Townships-Suburban						
York North	96,717	2.40	6,124	63.32	20,161	208.45
York East	63,951	26.32	3,330	52.08	9,170	143.39
Scarborough	63,862	1.59	3,150	49.32	16,326	255.64
Etobicoke	62,685	2.62	3,699	59.01	13,728	219.00
Rural						
Markham	10,820	0.17	394	36.39	279	25.76
Vaughan	9,977	0.16	316	31.67	564	56.51
King	7,148	0.08	215	30.07	173	24.26
2,000-4,999(3)	11,480	0.08	496	43.23	459	39.94
Georgina	1,717	0.05	82	47.52		
Total Municipalities	1,194,876	2.20	89,292		196,080	164.10
County of York	, , , , ,		- , , - ,	1 (5	1,757	1.47
Adjustments-County Rates					-,1,,	
Grants-Municipalities to						
County						
Utilities and Other						
Enterprises						
NET TOTAL YORK	1,194,876	2.20	89,292	7)1 73	197,837	165.57
MET TOTAL TOTAL	±9±219010	2.20	~ <i>)</i> , ~ <i>)</i> ~	14.10	191,001	107.71
NET TOTAL - METROPOLITAN						
REGION	1,297,350	1.22	94,450	70 90	012 700	1(), 70
MEGION	1,271,370	1.66	94,450	(2.00	213,780	164.78

Halton Towns	General Government	Protection 25-25 Property 8-25-25 Proper	Public Works	Sanitation  & Waste	Recreation & Community ol Service	Conservation of Health
Oakville Burlington 2,000-4,999(3) Village	52 34 55	65 41 51	58 61 75	27 16 26	29 25 15	5 2 4
Bronte Townships-Rural	7	3	2 .	2		
Nelson Trafalgar 2,000-4,999(3)	37 47 18	19 19 11	102 87 79	7 1 	1 2 1	2 5 1
Total Municipalities County of Halton	250 26	209 36	464	79	73	19 26
Adjustments-County Rates Grants-Municipalities		en no		***	~~	
to County NET TOTAL HALTON	276	<del>-</del> 1 244	<del>-</del> 9 652	79	73	45

<sup>(1)</sup> Less than \$500.00
a Information not available by municipalities

### REVENUE 1952

				Revenue				
Re	eal Property		Licences		County		Tot	al
***	and	and	and	Other Enterprises		Other		per
Bu	\$'000	Subsidies \$'000	Permits \$'000	(Net) \$'000	(Net) \$'000	Revenue \$1000	Amount \$'000	Capita
	φ σσσ	φ .000	\$ 1000	\$ .000	\$ .000	\$ .000	\$ .000	\$
	6.116		200	-		503	~ ol o	SE 00
	€,116 3,207	515 99	126 52	5		581 85	7,343	75.92 53.84
	3,011	417	126			317	3,871	60.62
	3,699	353	125	23	w ==	267	4,467	71.26
	380	78	9	(1)		17	484	44.70
	312	51	9	\ abc /		24	396	39.72
	215	53	3			8	279	38.97
	490 80	128 32	5 2			62 1 <sub>4</sub>	685	59.66 68.65
	88,820	7,659	1,234	963		6,100	104,776	87.69
		217	(1)	Alle Age	1,790	333	2,340	
		- 202		10 To	- 1,761		- 1,761 - 202	
		- 202					202	
				- 6	alle dro		- 6	
	88,820	7,674	1,234	957	29	6,433	105,147	88.00
				Total Control Control				
	93,820	8,999	1,332	957	29	6,742	111,879	86.24
				emuniphologopopopopo emini Albanisha (1974)				

the Utilities and Other Clark Net Net	Expenditure out of Revenue	county ONE tes	EXPEND 195		Education (School Levies, Etc.)	Net Debt	4 Amount	capita
.2 1 5	153 132 128	16 8 83	3	15 20 23	49 42 44	4 7 5	475 389 517	66.90 57.97 56.67
1	17	1		5	5	2	45	40.81
4 1 3 17 86	179 149 108 866 1	28 28 3 141 5	3	15 12 9 99 74	45 56 36 277 - 277	8	425 410 270 2,531 459 - 277	50.56 53.21 44.57 54.77
- 14 - 8)	867	746	3	173	de d	42 2	24 2,689	58.18

EXPEND	ITURE
195	2

		1952				
Peel	General Covernment	Protection to Persons & Property	Public Works	Sanitation   & Waste	Recreation & Community	Conservation
Town Brampton	46	70	128	24	34	1
Villages Port Credit	26	32	52	19	2	1
under 2,000(2)	11	8	11	4	1	(1)
Townships-Suburban Toronto	156	157	359	43	21	9
Townships-Rural Chinguacousy	11	6	58	W- 64	1	(1)
2,000-4,999(2) Toronto-Gore	13 2	6	106 16		1 (1)	`2
Total Municipalities	265	279	730	90	60	13
County of Peel Adjustments-County Rates	32	52	684			30
Grants-Municipalities to			- 14			- 2
County NET TOTAL PEEL	297	331	1,400	90	60	41
					==	===
York City						
Toronto	4,311	12,984	2,427	4,998	3,587	4,721
Towns Leaside	53	139	56	104	56	17
Mimico	55	74	68	75	22	7
New Toronto Weston	62 41	149 99	44 88	86 45	41 27	7 15
Newmarket	40	45	59	12	11	4
Aurora Villages	24	18	28	13	4	1.
Forest Hill	77	279	180	42	22	12
Long Branch Swansea	42 <b>3</b> 2	58 52	47 37	40 49	19 17	8
Richmond Hill under 2,000(4)	21	11	10	3	3 8	7 3 6
Townships-Suburban	33	43	1+1+	3	0	0
York York North	235 309	755 560	341	586 550	233 43	151 176
York Esst	138	424	136	202	89	92
Scarborough Etobicoke	238 289	495 433	901 <b>5</b> 52	473 377	87 1	71 83
Townships-Rural Markham				311.	_	
Vaughan	37 45	27 22	114 86			7 8
King 2,000-4,999(3)	19 67	7 26	70 190	5 8	3	· 9
Georgina	7	4	57	2	(1)	1
Total Municipalities County of York	6,675 147	16,704 286	6,729 514	7,673	4,273	5,406
Adjustments-County Rates		~ ~				
Grants-Municipalities to County						
Utilities and Other Enterprises						
NET TOTAL YORK	6,822	16,990	7,243	7,673	4,273	5,406
NET TOTAL-METROPOLITAN REGION	7,395	17,565	9,295	7,842	4,406	5,492

	· ·		EXPEND 195	OITURE 52				
Public Welfare	Education (School Levies, Etc.	Net Debt Charges	Utilities and Other Enterprises	Capital Expenditure out of Revenue		Other	Tota	Per Capita
φ σσσ	\$.000	\$ 000	\$'000	\$1000	\$1000	\$10	00 \$1000	\$
1	214	54			85	2	659	73.72
(1)	83 33	36 10	<u>+</u>	tally diss	44 16	9 12	310 106	77.44 50.96
9	681	3	122	31	246	35	1,872	62.39
4 5 1 22 91 	81 83 14 1,189	1 (1) 105 36	3 129 	25  56 16 	52 48 8 499  - 499	1 21 1 81 20	240 289 42 3,518 962 - 499 - 28	47.12 53.15 57.65 62.50
101	1,190	141	129	72	\$0 - 100	101	3,953	70.23
6,179	20,528	6,720		994	1,	164	69,113	103.56
4 5 13 2 6 4	667 225 375 205 108 47	271 66 41 120 33 16	   4 2	45 10 33 21 10	107 40 64 38 24 12	26 1 118 4 3	1,545 648 1,033 705 359 172	97.63 54.14 91.91 85.37 62.38 48.47
8 7 2 3 5	722 142 178 57 122	216 38 74 28 13		3 28 	110 27 37 8 24	12 8 2 5	1,680 439 515 152 306	99.04 50.55 62.39 48.25 46.31
57 76 26 81 32	2,423 3,232 1,545 1,168 1,781	823 462 222 88 366		70 82  63	292 295 194 143 203	67 313 325 25 258	5,963 7,280 3,475 3,770 4,438	60.28 75.27 54.33 59.03 70.81
4 9 7 28 10 6,568 870 	183 181 96 228 36 34,249 41	9,635 193	6		30 29 23 52 9 1,761 2,	27 7 16 55 (1) 444 194	478 396 277 682 127 103,553 2,245 - 1,761 - 202	44.19 39.65 38.77 59.45 73.91 86.66
7,236 7,426	34,290 36,347	9,526 10,115	132	1,430 1,675	2,	781	- 6 103,829 110,471	86.89 85.15

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans)

		DensityTax LevyDebt					
	Assessed	Assessed		per		per	
	Population	Population	Total	Capita	Total	Capita	
		per Acre	\$1000	\$	\$1000	\$	
Brant							
Cities							
Brantford	37,295	21.37	2,510	67.29	1,826	48.97	
Towns	5,337	7.79	246	46.04	746	139.79	
Townships-Suburban					1,,0		
Brantford	17,866	0.26	756	42.31	1,729	96.76	
Township-Rural 2,000-4,999(2)	7,958	0.07	252	31.73	19	2.44	
under 2,000(2)	2,282	0.07	83		19	1.76	
Total Municipalities	70,738	0.33	3,847	36.32 54.38	4,324	61.13	
County of Brant	1-,15-	0.00	3,011	71.50	20	0.29	
Adjustments-County Rates							
Grants-Municipalities to		-		err frances ir spin-is	This tempera		
County NET TOTAL BRANT	70,738	0.33	3,847	54.38	4,344	61.42	
NEI IOIAL DIANI	10,130		3,041	74.30	4,544	OT .42	
Wentworth							
Cities							
Hamilton	212,234	20.39	16,352	77.05	28,936	136.34	
Towns	7 025	8.38	221.	46.14	207	F0 1.0	
Dundas Villages	7,235	0.30	334	40.14	387	53.43	
under 2,000(2)	3,341	4.49	165	49.48	466	139.35	
Townships-Suburban				,,,,,		-57.57	
Saltfleet	10,367	0.42	328	31.67	1,344	129.60	
Barton	3,420	0.69	87	25.29	887	259.32	
Townships-Rural	7 600	0.00	053	25 00	000	7.00 50	
Flamborough East Ancaster	7,690 7,572	0.23	271 267	35.29	988 391	128.52	
2,000 - 4,999(3)	11,051	0.09	326	29.54	520	47.02	
Binbrook	1,414	0.05	53	37.62		71.02	
Park Commission			,,,	31			
Burlington Beach	2,995	16.73	110	36.56	285	95.34	
Total Municipalities	267,319	1.00	18,293	68.43	34,204	127.95	
County of Wentworth							
Adjustments-County Rates Grants-Municipalities to							
County							
Utilities and Other							
Enterprises							
NET TOTAL WENTWORTH	267,319	1.00	18,293	68.43	34,204	127.95	
NET TOTAL - BURLINGTON	338,057	0.70	22.140	65.49	38,548	114.03	
REGION	350,071				3-77.1-		

# REVENUE 1952

Real Property Grants Licences Utilities and CountyTot							
and	and		Other Enterprises		Other		per
Business Tax \$1000	\$ 1000	Permits \$'000	(Net)		Revenue \$'000		Capita \$
Ψ	Ψ	φ σσσ	φ	φ	φ	ψ	Ψ
2,505	186	19	***		92	2,802	75.13
246	29	2		400 000	5	282	52.77
755	100	8			40	903	50.54
249 82	49 15	5 _1	er es		9	312 107	39.22 46.82
3,837	379 286	35 (1)	us au	171	155	4,406 467	62.28
	- 98		ar en	- 171		- 171 - 98	
3,837	567	35	ms dan		165	4,604	65.07
163.52	998	303	749	eny soli	1,035	19,437	91.58
329	42	5	e -n		19	395	54.56
165	13	1			6	185	<b>5</b> 5 <b>.</b> 49
322 81	38 19	7 1			5 9	372 110	35.87 32.20
257	33	3			20	313	40.76
267 321	44 60	5			1.1	327 391	43.25 35.40
52	10	1			(1)	63	44.82
93 18,239	19 1,276	2 334	1 750		11 1,120	126	42.12
	365	(1)		368 <b>-</b> 367	102	835	
	-118		• •	-201		- 118	
	~-		- 21			- 21	
18,239	1,523	334	729	1		22,048	82.48
22,076	2,090	369	729	1	1,387	26,652	78.84
22.,010	===		To an a second s				===

EXPENDITURE 1952

	GGovernment	* Protection to Opersons & Property	en Public Oworks	Asnitation & Waste ORemoval	Recreation & Community O'Service	Conservation Olof Health
Brant City Brantford	185	456	208	227	186	237
Town Paris	34	22	וכ			
Townships-Suburban		33	31	6	5	11
Brantford Rural 2,000-4,999(2) under 2,000(2) Total Municipalities County of Brant	51 18 6 294 42	40 7 1 537 66	184 6 <b>5</b> 16 504 260	233	15 4 (1) 210	53 16 4 321
Adjustments-County Rates			Apr cos			45
Grants-Municipalities to County	00 Mg	- 38	- 28		~ ~	- 22
NET TOTAL BRANT	336	565	736	233	210	344
Wentworth City						
Hamilton	1,499	3,755	792	1,151	719	1,884
Town Dundas	27	47	61	20	7.0	_
Villages		-1-1	OI	20	13	5
under 2,000(2) Townships-Suburban	12	11	24	4	6	1
Saltfleet	26	13	55	1	8	7
Barton	12	1	15	1	(1)	1
Townships-Rural Flamborough East	19	13	52	p:-	/1 \	0
Ancaster	22	12	69	5 4	(1) (1)	3 2
2,000-4,999(3) Binbrook	25	7	91	(1)	ìí	7
Park Commission	3	1	17	1	1	(1)
Burlington Beach Total Municipalities	18	3,884	16	1,191	<u>3</u>	1,911
County of Wentworth	50	94	470			
Adjustments-County Rates Grants-Municipality to County	***	- 52	- 45			
Utilities and Other						
Enterprises NET TOTAL WENTWORTH	1,713	3,926	1,617	1,191	751	1,911
NET TOTAL-BURLINGTON REGION	2,049	4,491	2,353	1,424	961	2,255

# EXPENDITURE 1952

Public Owelfare	Education (School Levies, Etc.)	Met O Debt	Utilities and Other Enterprises	Capital Expenditure Out of Revenue	County Rates	o Other	Amount	Capita Source State Source State Source State Source State S
122	843	119	11	168		102	2,864	76.79
2	99	11			31	7	270	50.57
16 4 3 147 54 	347 118 44 1,451 1	10 (1)  140 5	111	9 13 7 197	81 46 13 171 	94 16 9 228 8	900 307 103 4,444 481 - 171 - 98	50.37 38.55 45.28 62.82
191	1,452	145	11	197		236	4,656	65.81
1,021	5,712	2,168		298		449	19,448	91.63
3	112	38	14	9	51	5	395	54.61
(1)	75	16	7		28	6	190	56.93
5 7	194 62	6 2	2	5	52 21	5 3	374 130	36.09 37.90
4 6 8 (1)	134 136 150 25	 4 (1)	8	1 16	63 49 85 15	9 6 2 (1)	302 319 395 63	39.30 42.07 35.77 44.88
3 1,057 140 	49 6,649 13 	2 <del>,245</del> 6	21	1 330  	3 367 367	1 486 28	131 21,747 801 - 367 - 118	43.82 81.35
			- 21				- 21	
1,176	6,662	2,251		330		514	22,042	82.46
1,367	8,114	2,396	11	527		750	26,698	78.97

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans)

		Donatta	- Поз	Torms	D - 1	A.
		of	Tax	Levy	Deb	T
	Assessed	Assessed		per		per
	Population	Populatio		Capita	Total	Capita
Lincoln		per Acre	\$ 1000	\$	\$1000	\$
Cities						
St. Catharines	38,619	10.79	3,074	79.59	3,628	93.94
Towns	12,695	6.36				
2,000-4,999 (4)	12,0%9	6.16	636	50.07	1,440	113.39
Village Beamsville	1 701	2 (0	75	1. 2		
Townships-Suburban	1,794	3.68	75	41.57	215	119.67
Grantham	16,736	1.03	602	35.99	1,762	105.28
Townships-Rural	, , ,			37 - 77	1,102	107.20
2,000-4,999 (5)	18,242	0.15	868	47.56	1,301	71.31
under 2,000 (2)	3,056	0.06	130	42.44	125	40.96
Total Municipalities County of Lincoln	91,142	0.47	5,385	59.07	8,471	92.92
Adjustments					50	0.55
County Rates						
Grants-Municipalities						
to County						
Utilities						
NET TOTAL LINCOLN	91,142	0.47	5,385	59.07	8,521	93.48
Welland						
Cities						
Niagara Falls	24,158	18.43	1,518	62.84	2,538	105.06
Welland Towns	16,292	16.80	967	59.38	930	57.09
Port Colborne	12,744	8.97	((0		6.0	
Fort Erie	8,071	5.61	660 463	51.77	628	49.29
Thorold	6,705	12.24	309	57.30 46.11	1,128 814	139.74
Villages	71-2		J <i>∨</i> )	40.11	014	121.40
under 2,000 (3)	4,795	4.12	302	62.88	835	174.22
Townships-Suburban	22 (22					
Stamford Crowland	20,633	0.99	1,078	52.23	3,205	155.32
Thorold	12,526 7,020	0.77	587	46.89	1,332	106.36
Townships-Rural	1,020	0.33	306	43.61	599	85.39
Bertie	5,721	0.17	320	55.88	1,307	228.51
2,000-4,999 (3)	11,895	0.11	476	39.99	1,145	96.28
Willoughby	1,182	0.07	54	45.59	29	24.91
Total Municipalities County of Welland	131,742	0.59	7,040	53.43	14,490	110.00
Adjustments					534	4.06
County Rates						
Grants - Municipalities						
to County						
Utilities						
NET TOTAL WELLAND	131,742	0.59	7,040	53.43	15,024	114.06
			,,-,-	75.15		114.00
NET TOTAL - NIAGARA	202 201					
REGION	222,884	0.54	12,425	55 - 74	23,545	105.64
					and the same of th	

### REVENUE 1952

Real Property	Grants	Licences	Revenue Utilities and	County'	age may have more dign dign disk dign	Tot	al
and	and	and	Other Enterprises		Other	0	per
Business Tax \$'000	Subsidies \$'000	\$'000	(Net)	(Net) \$1000	Revenue \$'000	Amount \$1000	Capita \$
,	т	T	7	т	*	,	,
3,069	204	68			302	3,643	94.34
635	83	5	J		25	757	54.00
75	5	(1)	1		4	85	47.48
597	74	13		~	13	697	41.63
867	129	7			17	1,020	<b>5</b> 5.91 56.06
128 5,371	<u>37</u> 532	94	10		<u>5</u> 366	$\frac{171}{6,373}$	69.93
	322	(1)		480	101	903	
				- 480		- 480	
en en	- 88					- 88	
			<u>- 9</u>		467	<u>-</u> 9 6,699	73.51
5,371	766	94			407	0,099	13.71
7 670	216	36	66		105	1,941	80.32
1,518 967	71	25			31	1,094	67.14
660	84	15			27	786	61.66
460	53	13			14	540	66.95 58.67
309	32	10		~=	42	393	
300	45	5	5		11	366	76.39
1,063	184	25			11 66	1,283 759	62.19
587 303	98 67	8			8	381	54.30
31.9	63	1	sn -m		30	413	72.20
471	128	5			22	626 88	52.62 74.76
53 7,010	<u>3</u> 3 1,074	147	71		. <u>368</u>	8,670	65.81
7,010	311	(1)		708	57	1,076	
en ***			~ ~	-708		- 708	
ent als	- 84					- 84	
			- 7			- 7	<del></del>
7,010	1,301	147	64		425	8,947	67.91
					892	15,646	70.20
12,381	2,067	241	65			1),040	10.20
		==			-		

		ENDITURE			
Lincoln City	General Government	Protection to Persons & Property	Public Works	Sanitation & Waste	Recreation & Community Service
St. Catharines	209	554	338	201	204
Towns 2,000-4,999 (4)	60	90	116	36	12
Village Beamsville Townships-Suburban	7	7	11	2	1
Grantham Townships-Rural	57	57	110	15	(1)
2,000-4,999 (5) under 2,000 (2) Total Municipalities	50 9 392	18 <u>5</u> 731	194 	1  255	(1) 218
County of Lincoln Adjustments-County Rates	151	59 	382		
Grants-Municipality to County Utilities and Other	-(1)	<b>-</b> 38	<b>-</b> 22		
Enterprises NET TOTAL LINCOLN	543	752	1,180	255	218
Welland Cities					
Niagara Falls Welland Towns	102 70	361 221	177 104	108 47	209 47
Port Colborne Fort Erie Thorold Villages	69 47 42	122 65 60	83 60 31	74 20 18	12 20 26
under 2,000 (3)	31	45	49	23	4
Townships-Suburban Stamford Crowland Thorold Townships-Rural	69 40 28	104  42	200 165 81	34 2 9	31 3 2
Bertie 2,000-4,999 (3) Willoughby	25 39 4	30 18 14	107 164 47	(1) (1) 	2 9
Total Municipalities County of Welland	566 74	1,082	1,268 515	335	365
Adjustments-County Rates Grants-Municipality to County		- 42			
Utilities and Other		no 40		~ =	~-
Enterprises NET TOTAL WELLAND	640	1,157	1,783	335	365
NET TOTAL - NIAGARA REGION	1,183	1,909	2,963	590	583
2. 20 ag 4 V21				Stratute Control of the Control of t	——————————————————————————————————————

### EXPENDITURE

	ŭ		· ·	=	1952					
	Conservation of Health		ucation School Levies,Etc.		Utilities and Other Enterprises (Net)	bure			T	otal
	Conservat of Health	Public Welfare	Education (School Levies,	Net Debt Charges	Utilities and Other Enterprise (Net)	Capital Expenditure out of	enue nty	툂	nt	ر <del>د</del> ھ
4.			PE O	\$ Net	uti. and Ente	Capital Expendi	Revenue County Rates	Other	Amount	per
\$	1000	\$1000	\$1000		\$1000	\$1000	\$ 000	\$1000	\$ 1000	\$
	181	124	1,158	235	19	4	~-	323	3,550	91.93
	12	6	245	44		21	112	5	759	59.81
	1	2	23	17		(1)	14	(1)	85	47.45
	5	27	273	32	37		83	5	701	41.88
	12	12	371 44	38 (1)	4 10	26	232	57	1,016	55.67 53.86
	213	173 219	2,114	366	70	51	<u>38</u> 479	394	165 6,276 893	68.86
		- 27					479	18	- 479	
		- 21						- 1	- 88	
	213	365	2,178		<u>- 9</u> 61		es es		<del>-</del> 9 6,593	
		305	2,170	366	61	51		411	6,593	72.33
	FO	1. 5	506							
	50 30	45 60	726 404	113 38	***	16	~-	41 36	1,932 1,073	79.96 65.85
	9 15	12	226 181	72 69			98 56	50 8	827	64.91
	īí	10	95	24	7	15	29	11	544 379	67.35 56.48
	5	3	105	40	60. 41	7	54	2	368	76.76
	9 17	16 22	467 230	56 43	P0 49	37	114 110	141	1,278	61.92
	9	9	137	2		2	45	116 16	748 382	59.74 54.46
	6 8	4 7	86 202	32 18		25 51	74 <b>1</b> 12	26 6	417	72.82
	170	192	2,876	<u>(1)</u> 507	7	153	17 709		634	53.27 85.18
		214	131	7		152		453 43	8,683 1,101	65.90
		- 40			***		708	- 2	- 708 - 84	
				600 000	- 7			ater 10	- 7	
	170	366	3,007	514		153	1	494	8,985	68.18
	383	731	5,185	880	61	204	1	905	15,578	69.88
					-					

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

	DensityTax LevyDebt						
	Assessed Population	Assessed Population per Acre	Total \$'000	per Capita	Total \$ '000	per Capita	
Haldimand Town							
Dunnville Villages	4,593	5.63	191	41.66	211	45 - 95	
under 2,000 (4) Townships-Rural	4,785	2.88	179	37.32	482	100.81	
Walpole under 2,000 (9) Total Municipalities County of Haldimand Adjustments-County Rates Grants-Municipalities to	3,129 10,371 22,878	0.05 0.05 0.08	156 <u>476</u> 1,002	49.77 45.89 43.78	17 143 853 415	5.34 13.82 37.30 18.14	
County NET TOTAL HALDIMAND	22,878	0.08	1,002	43.78	1,268	55.44	
Norfolk Town							
Simcoe Villages	7,138	11.64	467	65.36	861	120.62	
2,000 to 4,999 (2) under 2,000 (2)	5,016 2,487	6.03 2.39	324 104	64.62	810 641	161.55 257.67	
Townships-Rural 2,000 to 4,999 (6) under 2,000 (2) Park Commission	22,142 3,785	0.07 0.04	945 155	42.67 40.86	417 22	18.83 5.71	
Long Point Total Municipalities County of Norfolk Adjustments-County Rates	40,568	0.10	1,995	49.15	2,751 438	e 67.80 10.80	
Utilities NET TOTAL NORFOLK	40,568	0.10	1,995	49.15	3,189	78.60	
NET TOTAL - LAKE ERIE REGION	63 ,1446	0.09	2,997	47.21	4,457	70.25	
	REGION 4	- LAKE ERIE					
	EXPEN 19	DITURE 52				d	
Haldimand Town Dunnville		Persons & Police Public	00 \$	% Waste	Recreation & Community	Conservation of Jealth	
Villages under 2,000 (4)	20	32 <b>2</b> 7		4	7	1	
Townships-Rural Walpole under 2,000 (9) Total Municipalities County of Haldimand Adjustments-County Rates	6 25 80 1.8	1 78 5 193 70 339 29 408		1 16	2 5 17	3 5 	
Grants-Municipality to County NET TOTAL HALDIMAND	98 9	9 747		16	17	5	
						-	

### REVENUE 1952

			Revenue				
Real Property	Grants		Utilities and	County		Tot	01
and	and		Other Enterprises		Other		
Business Tax	Subsidies	Parmite	(Net)	(Wet)	Revenue	Amount	per Capita
\$1000	\$ 1000	\$1000	\$'000	\$ 1000	\$1000	\$1000	\$
Ψ	φοσο	φ 000	φοσο	φ 000	\$ 000	\$ .000	φ
.191	22	10		Dec 100	6	229	49.88
	^						
177	18	2	en 100	***	8	205	42.93
156	53	2	ma ma	w m	(1)	211	67.43
471	123				8	608	58.63
995	216	20	-		22	1,253	54.79
eq. 01	212	1		278	32	523	
	ed: 7-0			- 274		- 274	
en en	- 9	maj vin				- 9	
995	419	21		74	54	1,493	65.31
			10.00.00.00				
464	65	6	0		10	FF(	55 05
404	05	O	9	101.100	12	556	77.95
324	42	0			3.0	202	76 00
		2			13	381	76.02
104	13	1		NO -10	2	120	48.36
000	00/	0	(2)				ma a1
939	206	8	(1)	~~	6	1,159	52.34
154	31	2	***		2	189	49.85
a	a,	a	<u>a</u>		a.	a	8.
1,985	357	19	9		35	2,405	59.52
	251	1		479	19	750	
			MS 40	- 479		- 479	
en. mi			- 7			- 7	
1,985	608	20	2		51,	2,669	65.79
#1,7°7					- '	-,,	-2-12
			The second line of		NAME AND ADDRESS OF THE OWNER, WHEN PERSON ADDRESS OF THE OWNER, WHEN PERSON AND ADDRESS OF THE OWNER, WHEN		
2,980	1,027	41	2	14	108	4,162	65.62
			====				
		REC	GION 4 - LAKE ERIE	3			
				-			
			EXPENDITURE				
			1952				
	6)						
	Education (School Levies, Etc.		Utilities and Other Enterprises Capital Expenditure out of Revenue			mo	tal
	Education (School Levies,E		Utilities and Other Enterprise Capital Expenditu				
Public Welfare	(t)	Net Debt Charges	Utiliti and Oth Enterpr Capital Expendi out of	>> .	El .	يد	ಥ
Public Welfar	ca bc vi	# t	lit er er	es	Other	ZZ ZZ	er apita
67 T	du Sc Le	et ba	Util and Enter Capi Expe out	at	9	S S	Per Cap
A B	国	S Net		& County ORates	\$1000	co. Amount	- Pup
\$1000	\$1000		\$1000 \$1000	\$ .000			J 4.
10	71	8		25	5	235	51.23
2	F2	3	01, (7)	02	6	202	1.0 50
3	53	3	24 (1)	23	6	203	42.52
0	58	1		57	1	207	66.09
2	58	1		57 169	1		57.51
14	173	2				596	
29	355	14	24 (1)	274	18	1,241	51+.29
77	2	2			13	549	
		~ ~		- 274		- 274	
<b>-</b> 9				***		- 9	
97	357	16	24 (1)		31	1,507	65.97
					-		

EXPENDITURE 1952

	General Government	Protection to OPERSONS & Property	Public ON Works	Sanitation & Waste	Recreation & Community	Conservation of Health
Norfolk Town						
Simcoe Villages	34	52	92	15	. 30	7
2,000-4,999 (2) under 2,000 (2) Townships-Rurul	27 6	38 12	61 20	15 1	11 2	3
2,000-4,999 (6) under 2,000 (2) Park Commission	59 11	12	336 51	(1)	(1)	11 2
Long Point Total Municipalities County of Norfolk Adjustments-County Rates	137 27	114 76	a 560 410	a 31	43 	24 
Utilities and Other Enterprises NET TOTAL NORFOLK	1.64	190	970	31	<del></del> 43	24
NET TOTAL - LAKE ERIE REGION	262	289	1,717	47	60	29

### REGION 5 - UPPER THAMES

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdrafts and Temporary Loans)

		DensityTax LevyDebt					
<u> </u>	Assessed Population	of Assessed Population per Acre	Total \$'000	per Capita \$	Total \$'000	per Capita	
St. Thomas Town	18,844	14.17	1,223	64.93	2,204	116.96	
Aylmer Villagas	3,645	6.70	181	49.73	858	235.45	
under 2,000 (7) Townships-Rural	5,723	1.88	219	38.29	1,02	70.28	
Yarmouth 2,000-4,999 (5) Dorchester South Total Municipalities County of Elgin	6,931 15,266 1,766 52,175	0.10 0.05 0.06 0.12	313 820 92 2,848	45.13 53.73 51.96 54.60	397 932 26 4,819 760	57.26 61.05 14.88 92.37 14.57	

# EXPENDITURE 1952

Public OWelfare	Education (School Levies,Etc.)	met ODebt Charges	Utilities and Other Enterprises	capital CExpenditure Cout of Revenue	County O Rates	tal Other	T	total
7	.149	51		30	89	11	567	79.44
6 2	70 45	49 (1)	7	28 17	56 18	(L)	373 131	74.44 52.57
15 3	422 66	12		55 3	273 43	5 2	1,200	54.20 48.97
33 129	752 1	116 25		133 15	479  - 479	27 39	a 2,456 722 - 479	a 60.50
162	753	141	7_	148			- 7 2,692	66.36
259	1,110	157	24	148		97	4,199	66.20

### REGION 5 - UPPER THAMES

### 1952

Real Property and Business Tax \$ 1000	Grants and Subsidies	Licences and Permits	Revenue	County Rates (Net)	Other Revenue	Tota  Amount \$'000	per Capita
1.,223	73	18	~ =		43	1,357	72.00
180	20	10	e		6	216	59.36
219	24	3	3	***	14	263	45.96
306 811 91 2,830	40 161 12 330 300	3 6 1 41 (1)	3	 470	6 11 1 81 45	355 989 105 3,285 815	51.24 64.77 59.53 62.97

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY,
DEBT (Debentures, Bank Overdrafts, and Temporary Loans)
1952

		Density-	Tax	Levy	Debt-	
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total \$'000	per Capita
Elgin (continued) Adjustments-County Rates		A4	1	'		·
Grants-Municipalities to NET TOTAL ELGIN	County 52,175	0.12	2,848	54.60	5,579	106.94
Middlesex						
City London	97,109	13.89	7,814	80.46	5,852	60.27
Towns	3,705	1.91	169	45.68	454	122.61
Strathroy Parkhill	976	1.96	49	49.72	120	123.05
Villages under 2,000 (5)	2,956	1.35	98	33.10	194	65.67
Townships-Suburban London	16,873	0.17	800	47.44	2,930	173.65
Westminster Townships-Rural	15,773	0.26	628	39.83	1,184	75.08
2,000-1,999 (4)	11,408	0.05	527 729	46.19 59.18	100 671	8.73 54.45
under 2,000 (9) Total Municipalities	12,318 161,118	0.21	10,814	67.12	11,505	71.41
County of Middlesex Adjustments-County Rates					202	1.25
Grants-Municipalities to County						
NET TOTAL MIDDLESEX	161,118	0.21	10,814	67.12	11,707	72.66
Oxford						
City Woodstock	15,834	4.74	756	47.72	1,059	66.87
Separated Town Ingersoll	6,448	3.59	314	48.66	1,193	185.02
Town	5,387	3.52	246	45.64	1,181	219.29
Tillsonburg Villages						
under 2,000 (3) Townships-Rural	3,012	1.41	110	36.48	88	29.16
2,000-4,999 (8) under 2,000 (3)	21,919 4,189	0.06 0.04	864 202	39.40 48.12	73 L 14	33·34 3·42
Total Municipalities	56,789	0.12	2,492	43.85	4,266	75.12
County of Oxford Adjustments-County Rates					46	0.81
Grants-Municipalities to Utilities	County					
NET TOTAL OXFORD	56,789	0.12	2,492	43.85	4,312	75.93
NET TOTAL-UPPER THAMES	270,082	0.16	16,154	59.81	21,598	79.97
REGION						

# REVENUE 1952

Real Property	Grants	Licences	Revenue		i rell rella false des com cuer sum sobre de		
and	and	and	Utilities and Other Enterprises	Potos	Other	Tota	
Business Tax	Subsidies		(Net)	(Net)	Revenue	Amount	per Capita
\$1000	\$1000	\$'000	\$1000	\$ 000	\$1000	\$ 1000	\$
	·	7	*	φυσο	φ σσσ	ψ σσσ	φ
		also dan	***	- 470	no de	- 470	
0.000	- 36	~ -				- 36	
2,830	594	41	3		126	3,594	68.89
			Affair Communication of the Co				A THEORY SAN AND ADDRESS OF THE SAN AND ADDRE
7,789	422	148	34		368	8,761	90.22
169	16	2		4m mm	2	189	50.93
48	3	(1)	or or		2	53	53.99
98	10	1	~ ~	***	5	114	38.41
782 615	1.00 63	6 7			10 3	898 688	53.24 43.62
		·					
520	103	5	ED 44		7	635	55.66
709	139	6	m m		5_	859	69.77
10,730	856 611	175	34		402	12,197	75.70
	OTT	(+)	dan vox	758	65	1,434	
	- 108		~ ~	- 758		- 758 - 108	
						- 100	
10,730	1,359	175	34		467	12,765	79.23
Property Company Company							
756	38	23	AN 400		29	846	53.42
314	20	11			Ĭį.	349	54.14
243	26	3	5	60° MIL.	10	287	53.35
110	14	1			3	128	42.51
850	174	11			19	1,054	48.10
198	41	2			2	243	58.10
2,471	313	51	5		67	2,907	51.21
	228	1	60 500	389	36	654	
		NO 000		- 385	tow via	- 385	
	- 28	m m	(2)	W 10		- 28	
0 1.71	513	52	<u>(1)</u>	7	103	(1) 3,148	55.45
2,471		72	, 	4	103	3,140	22 • 42
16,031	2,466	268	42	4	696	19,507	72.23
			==				

EXPEND	ITURE
195	2

		1925				
Elgin	General Government	Protection to Sersons & Property	& Public O Works	Senitation & Waste	Recreation & Community Olservice	Conservation
City St. Thomas	775	0).77	60	102	2.01	
Town	115	247	63	131	104	5 <b>7</b>
Aylmer Villages	20	24	38	6	8	3
under 2,000 (7) Townships-Rural	23	33	34	6	4	1
Yarmouth	13	7	52			
2,000-4,999 (5)	36	15	231		4	5
Dorchester South	4	(1)	18		(1)	(1)
Total Municipalities	211	326	436	143	120	66
County of Elgin Adjustments-County Rates	37	52	436			36
Grants-Municipalities to County		- 11	- 7			
NET TOTAL ELGIN	248	367	865	143	120	102
Middlesex						
City London	496	1,429	836	869	1.07	65)
Towns	470	1,467	0,0	009	407	651
Strathroy	25	22	20	1	11	9
Parkhill	7	9	7	(1)	1	
Villages under 2,000 (5)	12	12	22	(1)		(-)
Townships-Suburban	4.	12	22	(1)	2	(1)
London	56	65	173	13	5	2
Westminster	26	23	92	2		(1)
Townships-Rural	24	_	365	2		
2,000-4,999 (4) under 2,000 (9)	29	5 9	165 239	(1)	(1)	1
Total Municipalities	675		1,554	886	427	665
County of Middlesex	40	143	909		741	25
Adjustments-County Rates		 76	~~			
Grants-Municipality to County	the side	-76	- 32			
NET TOTAL MIDDLESEX	715	1,641	2,431	886	427	690
Oxford						THE RESIDENCE OF THE PERSON NAMED IN
City						
Woodstock	63	159	84	39	30	32
Separated Town Ingersoll	0.5	2.0	06			
Town	35	39	36	10	9	11
Tillsonburg	22	42	30	12	11	
Villages						
under 2,000 (3) Townships-Rural	1.1	15	24	Ţ	5	
2,000-4,999 (8)	46	6	282	1	1.	(1)
under 2,000 (3) Total Municipalities	187	<u>263</u>	<u>70</u> 526	62	(1)	1.2
County of Middlesex	28	61	3.94	63 	55	4 <b>3</b> 20
Adjustments-County Rates	~-		J./T			
Grants-Municipalities to County	- l	- 13	- 12		****	~-

	EXPENDITURE  1952										
Φ	ducation (School Levies,Etc.	10	es inses	ture			T	otal			
Public O Welfare	Education (School Levies, E	Met ODebt Charges	Outilities of and other Net	Capital Expenditure Cout of Revenue	SRates	\$ 000 ther	s coor	capita			
49	<b>3</b> 67	131	~ ==	50	800 mg	23	1,337	70.93			
2	56	14		non non	36	2	209	57.37			
10	76	7		2	52	4	252	44.03			
6 12 1 80 153 	153 357 42 1,051	18 27 2 199 79 		20 (1)  72 12	83 266 32 469 - 469	7 14 3 53 9	359 967 102 3,226 814 - 469 - 36	51.73 63.37 57.93 61.83			
215	1,051	278		84		62	3,535	67.74			
	eth distribution to the second			==							
347	3,038	364				280	8,717	89.76			
9 (1)	48 18	8 2		4	31 10	3 (1)	191 54	51.61 55.74			
2	34	, 2		600 604	20	3	109	36.80			
12 9	366 320	40 48			171 139	2 21	905 680	53.66 43.11			
4 6 389 269	228 <u>299</u> 4,351 6	26 501 20		7	162 228 761 - 758	19 5 333 20	627 844 12,127 1,432 - 758 - 108	54.98 68.49 75.27			
658	4,357	521		11	3	353	12,693	78.78			
32	310	80			en en	19	848	53 - 53			
10	107	82	w ee			19	358	55.45			
3	95	37		24	29	2	307	56.93			
3	40	1+		(1)	19	2	124	41.07			
10 1 59 109 	376 90 1,018 4	9 2 214 5 	(1)	32	267 70 385  - 385	45 3 90 18	1,051 21,8 2,936 633 - 385 - 28	47.94 59.26 51.68			

		EXPENDITUE 1952	RE			no
	deneral Government	Protection to Compare Persons & Property	# Public O Works	Sanitation & Waste G Removal	Recreation & Community	Conservatio
Oxford (continued) Utilities and Other						
Enterprises NET TOTAL OXFORD	214	311	908	63	56	63
NET TOTAL-UPPER THAMES REGION	1,177	2,319	4,204	1,092	603	855

### REGION 6 - BORDER

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density-	Tax	Levy	Del	ot
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total	per Capita
Essex City			•	·	,	,
Windsor	125,760	13.23	8,906	70.82	15,192	120.80
Separated Town Riverside	10,138	4.50	483	47.68	1,491	147.11
Towns Leamington	7,552	11.06	401	53.15	1,330	176.15
2,000-4,999 (4) under 2,000 (3)	12,850	4.47	537 181	41.81	1,752	136.36
Villages under 2,000 (2)				******		
Townships-Suburban	2,048	1.97	72	34.94	752	367.15
Sandwich East Sandwich West	17,560 11,534	1.36	436 356	24.83 30.89	1,253	71.38 163.63
Townships-Rural Mersea	6,811	0.12	368	54.09	875	128.41
2,000-4,999 (7) under 2,000 (5)	21,598	0.10	1,003	46.42	1,549	71.74
Total Municipalities	7,708		419 13,162	54 · 39 57 · 92	26,997	118.80
County of Essex Adjustments-County Rates					250	1.10
Grants-Municipalities to County						
NET TOTAL ESSEX .	227,276	0.52	13,162	57.92	27,247	119.90
Kent City						
Chatham	21,730	12.63	1,490	68.56	2,306	106.13
Towns Wallaceburg	7,355	9.11	390	52.98	1,330	180.79
2,000-4,999 (4) Bothwell	9,938 727	5.03 1.45	430 <b>3</b> 5	43.28	2,285	229.92 104.48
Villages under 2,000 (5)	2,840	1.87	133	46.71	349	122.73
4,000 ())	2,040	1.00	100	40.11	347	7713

S. Public Welfare	Education (School Levies, Etc.)	% Net OO Debt OCharges	O Enterprises	Capital Expenditure Coo out of Revenue	County ORates	other Other	de Amount	ter Capita Capita
160	1,022	219	-(1)	32		108	<u>-(1.)</u> 3,156	55.55
1,033	6,430	1,018		127	3	523	19,384	71.76
Fallenger Company of the Company of		-		= ====			-	

### REGION 6 - BORDER

# REVENUE 1952

Real Property and Business Tax	Grants and Subsidies \$ 1000	Licences and Permits	Revenue Utilities and Other Enterprises (Net) \$ 1000	County Rates (Net)	Other Revenue		per
8,856	512	153		~ ~	544	10,065	80.04
483	24	žį.			28	539	53.21
399 533 181	27 60 19	15 8 1	<u>+</u> (1)		13 20 10	458 621 211	60.59 48.35 56.86
70	13	(1)	~ ~		4	87	42.42
429 356	48 48	8 10	<del></del> 6		5	490 426	27.89 36.96
341 909 <u>365</u> 12,922  	55 135 90 1,031 539 	2 10 30 241 (1)	10	484 - 484	5 22 22 679 63	403 1,076 507 14,883 1,086 - 484 - 176	59.15 49.83 65.71 65.49
12,922	1,394	241	10		742	15,309	67.36
The second secon							
1,490	91	14			81	1,676	77.11
390 427 35	32 40 5	11 3 (1)	1		5 22 3	438 493 43	<b>5</b> 9.60 49.61 <b>5</b> 9.32
131	18	1	1	no 444	14	155	54.68

### REGION 6 - BORDER

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans)

		Density	Tax	Levy	Deb	t
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total \$1000	per Cupita \$
Kent (continued) Townships-Rural Chatham Harwich Dover Raleigh 2,000-4,999 (3) under 2,000 (3) Total Municipalities County of Kent Adjustments-County Rates Grants-Municipalities to County	8,541 6,011 5,456 5,250 8,060 4,141 80,049	0.10 0.07 0.08 0.07 0.05 0.04	452 331 306 257 504 265 4,593	52.94 55.13 56.00 48.97 62.59 63.98 57.38	523 240 279 272 384 190 8,234 175	61.23 39.87 51.05 51.78 47.59 45.94 102.84 2.18
Utilities NET TOTAL KENT	80,049	0.14	4,593	57.38	8,409	105.02
NET TOTAL-BORDER REGION	307,325	0.30	17,755	57.78	35,656	116.02

### REGION 6 - BORDER

Essex	Government	Protection 1927  Protection & COMMENT OF THE PROPERTY & COMMENT OF THE	ch Public O Works	Sanitation  Waste	Recreation & Community	Conservation of Health
City Windsor	879	2,128	411	810	496	244
Separated Town	019	2,120	411	010	470	444
Riverside	38	62	90	35	2	11
Towns Leamington	20	F7	38	16	23	5
2,000-4,999 (4)	39 65	57 71	93	26	28	5 7
under 2,000 (3)	24	54	26	1	2	i
Villages	0	3.0	10	2	2	1
under 2,000 (2) Townships-Suburban	8	10	19	3	2	+
Sandwich East	31	45	50	29 8	1	5 4
Sandwich West	39	37	55	8	(1)	14
Townships-Rural Mersea	05	1,	88	1	1	3
2,000-4,999 (7)	25 48	26	208	5	6	3 9 6
under 2,000 (5)	33	11	149	1	(1)	6
Total Municipalities	1,229		1,227	935	561	296
County of Essex Adjustments-County Rates	50	196	490			
Grants-Municipalities to		- 114	- 31			
County			-			
NET TOTAL ESSEX	1,279	2,587	1,692	935	561	296

### REGION 6 - BORDER

### REVENUE 1952

Real Property and Business Tax \$ '000	Grants and Subsidies \$'000	Licences and Permits	IIC V CIICC	County Rates (Net) \$1000	Other Revenue		per
440 330 304 251 484 264 4,546	102 55 57 50 95 46 591 515	2 2 1 2 4 2 4 2 (1)	  2 	583 - 583	4 6 4 5 5 3 142 31	548 393 366 308 588 315 5,323 1,129 - 583 - 72	64.14 65.38 67.11 58.63 72.97 76.12 66.50
4,546	1,034	42	- 2		173	- 2 5,795	72.39
17,468	2,428	283	2.0		915	21,104	68.67
P. Williamson		-					

### REGION 6 - BORDER

Public Welfare	Education (School Levies, Etc.)	Net on Debt		Capital Expenditure Colout of Revenue	County Nates	ooo i	Amount	capita capita
673	3,094	1,111		37		113	9,996	79.48
14	207	75	40 10			7	541	53.41
4 19 1	123 180 58	94 51 13		3 19 1	41 63 19	6 10 5	449 632 205	59.40 49.16 55.10
1	25	7	·	5	10	(1)	91	44.36
16 14	194 168	58 48			52 43	5	486 422	27.65 <b>3</b> 6.63
4 8 4 758 255 - 31	131 413 151 4,744 3	71 160 63 1,751		4 8  77 45	45 154 58 485 - 484	24 9 34 219 31	401 1,054 <u>510</u> 14,787 1,056 - 484 - 176	58.83 48.80 66.22 65.06
962	4,747	1,751		122	1	250	15,183	66.80

### REGION 6 - BORDER

# EXPENDITURE 1952

Kent	General	Protection to Opersons & Opersons	es Tublic Oworks	Sanitation Sewaste ORemoval	es-Recreation & Community Service	Conservation
City					70	0.3
Chatham	96	380	145	64	72	21
Towns	47	67	57	27	14	2
Wallaceburg		80	76		19	
2,000-4,999 (4) Bothwell	53 3	6	1.1	3	4	3 (1)
Villages	2	O	4. 4-	-A-	Т	(-)
under 2,000 (5)	15	21	23	5	6	1
Townships-Rural						
Chatham	17	11	179			1
Harwich	16	9	88			2 2 1
Dover	15	3 7	93		1	2
Raleigh	13		71		(3)	2
2,000-4,999 (3) under 2,000 (3)	27 17	11	138 62	1	( + )	(1)
Total Municipalities	319	<u>5</u>	943	101	117	35
County of Kent	54	84	775			34
Adjustments-County Rates						
Grants-Municipalities to		- 20	- 37			
County						
Utilities and Other						
Enterprises NET TOTAL KENT	272	664	1,681	101	117	69
NET TOTAL KENT	373	004	1,001	101	TT (	09
NET TOTAL-BORDER REGION	1,652	3,251	3,373	1,036	678	365
						-

### REGION 7 - ST. CLAIR RIVER

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Debt	Debt			
	Assessed	of Assessed		per		per
	Population	Population per Acre	Total \$'000	Capita \$	Total \$'000	Capita \$
Lambton		per Acre	ψ	Ψ	φυσσ	Ψ
City						
Sarnia	37,480	3.21	2,354	62.81	4,893	130.55
Towns						
Petrolia	3,130	1.20	149	47.61	302	96.64
Forest	1,800	3.06	73	40.43	59	32.74
Villages						
under 2,000 (9)	7,102	1.32	306	43.14	367	51.63
Townships-Rural						0.6
2,000-4,999 (8)	24,222	0.04	1,441	59.51	1,765	72.86
under 2,000 (2)	3,084	0.03	207	67.11	110	35.74
Total Municipalities	76,818	0.11	4,530	58.98	7,496	97.58
County of Lambton					90	1.18
Adjustments-County Rates						

### REGION 6 - BORDER

Public Welfare	Education (School Levies, Etc.)	ν Φ Φ	Utilities and Other Enterprises Net	Capital NGE Expenditure Caut of Sevenue	<b>₩</b>			-Total
Public Welfar	Educ (So	Met OCharges	S Util.	Expendical Capital	County	o Other	S Amount	the Capita
55	508	149	46			124	1,660	76.41
4 7 (1)	143 151 14	43 42 1		8 4	29 43 4	8 2 1	449 483 45	60.99 48.63 61.31
I	52	6		3	16	5	154	54.20
6 6 3 3 1 2 88 101	147 131 101 94 172 107 1,620 2	79 54 58 45 68 <u>34</u> 579	46	23 1 31 15 85	78 88 65 68 125 68 584 - 583	5 (1) 23 7 20 1 196 77	546 394 365 341 579 297 5,313 1,127 - 583 - 72	63.96 65.63 66.86 64.93 71.88 71.72 66.38
			- 1				- 1	
175	1,622	579	45	85	1	272	5,784	72.24
1,137	6,369	2,330	45	207	2	522	20,967	68.22

### REGION 7 - ST. CLAIR RIVER

			Revenue				
Real Property and Business Tax	Grants and Subsidies \$'000	and Permits	s Utilities and Other Enterprises (Net) \$ 1000	County Rates (Net) \$*000			per Capita
2,353	325	49			93	2,820	75.23
149 72	16 11	1 (1)			6 33	172 116	54.97 64.22
297	47	14	1	***	19	368	51.80
1,322 197 4,390	357 45 801 251	11 2 67 (1)	1  	396 - 396	32 6 189 47	1,722 250 5,448 694 - 396	71.09 81.03 70.91

### REGION 7 - ST. CLAIR RIVER

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

			of		-Tax Levy	Debt	
	Asses Populat		ssesse pulat	ion Tot			per Capita
Lambton (continued) Grants-Municipalities to County		р	er Acı	re \$10	\$	\$1000	\$
Utilities NET TOTAL LAMBTON	76,8	318	0.1	1 45.	.30 58.98	75.86	98.76
NEW MOMAY OF STATE DITTOR	7/ (	0.7.0	0.3		20 50 00	====	00 70
NET TOTAL-ST. CLAIR RIVER REGION	76,8	<del></del>	0.1	1 45	30 58.98	75.86	98.76
	REGION	7 - ST.	CLAI	R RIVER			
		EXPEND 195					
Lambton	General Government	sion & &	Property	Public Works	Sanitation & Waste	Recreation & Community Service	Conservation of Health
City Sarnia	206	3:	95	354	141	82	105
Towns Petrolia Forest	17 9		22	20 14	3 3	12 30	3
Villages under 2,000 (9)	34		37	65	7	8	8
Townships-Rural 2,000-4,999 (8) under 2,000 (2) Total Municipalities	74 11 351		32 3 02	458 84 995	1  155	(1)  132	21 4 142
County of Lambton	25		59	373			
Adjustments-County Rates Grants-Municipalities to County	- 1	- 2	23	- 17			00 m
Utilities and Other				-~			
Enterprises NET TOTAL LAMBTON	375	51	<del>-8</del>	1,351	155	132	142
NET TOTAL-ST. CLAIR RIVER	375	5 <sup>1</sup>	+8	1,351	155	132	142

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REGION

### REGION 7 - ST. CLAIR RIVER

#### REVENUE 1952

	KCASUM6				
Real Property Grants Licences	Utilities and	County		Tot	al
and and and 0	ther Enterprises	Rates	Other		per
Business Tax Subsidies Permits	(Net)	(Net)	Revenue	Amount	Capita
\$'000 \$'000 \$'000	\$1000	\$1000	\$1000	\$1000	\$
- 71	ser na			- 71	
10 mm	- 1			- 1	
43.90 981 67	no na	0.0- 0.00	236	5,674	73.86
10.00			22/	- (57)	F0 06
43.90 981 67		100 100	236	5,674	73.86

### REGION 7 - ST. CLAIR RIVER

	$\widehat{}$			NDITURE 952				
Public OWelfare	Education (School	Met OCharges	Outilities and Other Senterprises	Capital Expenditure of out of Revenue	County ORates	oco other	Amount	ealer Capita
120	1,001	334		15		67	2,820	75.24
6 1	50 20	16 3		9	17 10	2	168 115	53.64 63.63
6	115	16		10	36	74	346	48.74
14 1 148 112  - 22	575 78 1,839 9 	193 19 581 9	1 1 	34	282 50 395 - 395	37 3 115 18  8	1,688 253 5,390 615 - 395 - 71	69.71 82.08 70.17
was while			- 1				- 1	
238	1,848	590		34	44 44	125	5,538	72.09
238	1,848	590	to to	34		125	5,538	72.09

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debenture, Bank Overdraft and Temporary Loans)

		Density	Tax	Levy	Debt	
	Assessed	Assessed		per		per
	Population	Population	Total	Capita	Total \$'000	Capita \$
Perth		per Acre	\$1000	\$	\$ .000	φ
City						
Stratford	19,302	12.47	1,080	55.95	1,491	77.25
Separated Town	4,061	1.66	181	44.61	926	228.00
St. Mary's Towns	4,001	1.00	101	77 101	,	
Listowel	3,457	4.04	158	45.61	580	167.70
Mitchell	1,972	1.75	68	34.28	60	30.29
Village Milverton	1,068	2.44	61	57.40	71	66.29
Township-Rural	ŕ					
2,000-4,999 (6)	14,282	0.04	651	45.55	293	20.49
under 2,000 (5)	7,689 51,831	0.04	427	55.48 50.64	62 3,483	8.00
Total Municipalities County of Perth	21,031	0.10	2,020	70.04	J, TOJ	
Adjustments-County Rates						
Grants-Municipalities to						
County Utilities						
NET TOTAL PERTH	51,831	0.10	2,626	50.64	3,483	67.17
		popularization				
Waterloo Cities						
Kitchener	50,363	7.20	3,589	71.27	9,494	188.50
Galt	20,801	5.91	1,128	54.23	1,650	79.33 223.70
Waterloo	12,449	4.34	900	72.26	2,785	223.10
Towns Preston	8,189	4.49	346	42.29	460	56.23
2,000-4,999 (2)	6,351	6.37	285	44.81	364	57.30
Villages		0.00	3.07	20.00	285	07 02
under 2,000 (3)	3,932	2.30	127	32.22	385	97.92
Townships-Rural Waterloo	9,535	0.13	332	34.84	585	61.31
2,000-4,999 (4)	17,265	0.11	584	33.84	288	16.67
Total Municipalities	128,885	0.50	7,291	56.57	16,011	0.22
County of Waterloo Adjustments-County Rates					20	O # Euca
Grants-Municipalities to						
County						
Utilities NET TOTAL WATERLOO	128,885	0.50	7,291	56.57	16,039	124.44
NET TOTAL WATERLOO	120,000	_			, ,,	
Wellington						
City Guelph	28,617	5.17	1,453	50.79	2,598	90.80
Towns	20,021	7 1				
2,000-4,999 (2)	5,713	2.66	269	47.03	768	134.40
under 2,000 (2)	3,123	2.70	130	41.75	.101	32.35
Villages under 2,000 (5)	4,098	1.71	181	44.21	442	107.87
Townships-Rural						
2,000-4,999 (5)	13,324	0.05	599	44.93	93 162	6.97
under 2,000 (7) Total Municipalities	10,833	0.03	610 3,242	56.35 49.35	4,164	63.37
Total Paritorparitors	0),100	0.10	5,00,00	.,.,,	,	

Real Property	and	Licences	Revenue s Utilities and Other Enterprises	County Rates	Other	Tot	al
Business Tax \$'000	Subsidies \$'000	Permits \$'000	(Net)	(Net)	Revenue \$'000	Amount \$'000	Capita \$
·	Ψ	Ψ	Ψ	Ψ	φ σσσ	φ 000	Ψ
1,080	116	48			39	1,283	66.46
181	15	1			5	202	49.83
158 67	20 17	(1)			15 6	194 90	56.14 45.71
61	11	(1)	2		1	75	70.33
634 382 2,563 	186 153 518 255 	6 3 59 (1)	3	289	26 20 112 24	853 558 3,255 568 - 289 - 49	59.71 72.52 62.80
2,563	724	59	- 3	The top directions consists the six	136	- <u>3</u>	67.16
		mentalpromonent on county of the page from particular december of the page from particular december of the page from particular december of the page from pa	and the same of th				
3,527 1,107 887	299 89 85	73 24 5	  	00 100 	249 29 28	4,148 1,249 1,005	82.36 60.05 80.71
346 282	37 40	5 3	1		14 33	403 358	49.18 56.36
125	16	2	(1)	min dem	5	148	37.62
319 559 7,152  	48 112 726 302 	7 123 (1)	1 2	312 - 312	8 31 397 7	379 710 8,400 621 - 312 - 105	39.72 41.15 65.17
7,152	923	123	- 2		404	<del>- 2</del> <del>8,602</del>	66.74
		Marie Control of the	and the second second				
1,438	77	16	76		93	1,700	59.41
267 130	33 15	1	2		11 10	312 158	54·53 50.50
181	19	1			10	211	51.38
584 602 3,202	132 150 426	7 5 31	  78	0 0 0 0	20 18 162	743 775 3,899	55.76 71.59 59.33

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debenture, Bank Overdraft and Temporary Loans)

		1952				
		Density-	Tax	Levy	Debt	
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total Ca	per apita \$
Wellington (Continued) County of Wellington Adjustments-County Rates Grants-Municipalities to County Utilities					271	4.12
NET TOTAL WELLINGTON	65,708	0.10	3,242	49.35	4,435	67.49
NET TOTAL-UPPER GRAND RIVER	246,424	0.17	13,159	53.40	23,957	97.21
	REGION 8 -	UPPER GRAND	RIVER			
	EX	PENDITURE 1952		_1		
Perth	G Government	Protection to Persons	Public Works	Sanitation & Waste Removal	Recreation & Community	Conservation of Health
City	73	238	179	83	75	42
Stratford Separated Town				5	7	7
St. Mary's Towns	18	34	31	2		
Listowel Mitchell Village	15 8	24 15	24 21	10	9	(1)
Milverton	3	1	12	1	10	
Townships-Rural 2,000-4,999 (6) under 2,000 (5)	32 23	14 8	319	(1)	3 1	10 6 67
Total Municipalities County of Perth	172 35	337 47	807 371	99	114	
Adjustments-County Rates Grants-Municipalities to County		- 15	- 21			
Utilities and Other Enterprises				at- 90		
NET TOTAL PERTH	207	369	1,157	99	114,	67
		And the second control of the second control				
Waterloo Cities Kitchener Galt	292 98	644 202	277 170	370 63	262 47	438 64
Waterloo Towns	103	143	63	78	70	92
Preston 2,000-4,999 (2)	41 26	59 40	43 67	21 12	23 19	5 5

### REVENUE

			Revenue				***
Real Property	Grants	Licences	Utilities and	County		Tot	al
and	and	and Of	ther Enterprises	Rates	Other		per
Business Tax \$'000	Subsidies	Permits	(Net)	(Net)	Revenue		Capita
φ.000	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000	\$
No. 17	451	(1)		F 0 2	1.0	005	
	471	` ′	~ ~	501	43	995	
	01			- 500		- 500	
970 mi	- 84			my rise		- 84	
			- 27			27	
3,202	793	31	<del>-31</del> 41		000	37	75.00
J 9 4 0 4	173	21	4上	1	205	4,273	65.03
			-			-	
12,917	2,440	213	41	7	7115	16,357	66.37
The state of the s			T-	1	147	10,371	

#### REGION 8 - UPPER GRAND RIVER

#### EXPENDITURE 1952 (School Levies, Etc.) Utilities & Other Other (Net) Expenditure out of Education ---Total----Public Welfare Charges Revenue Per Capita County Amount Other % Net \$1000 \$1000 \$1000 \$1000 \$ \$1000 \$1000 96 39 358 20 58 1,283 66.45 3 74 9 46.73 3 2 47 52.30 46.59 19 4 181 22 15 1 92 15 7 3 8 1 64 60.26 264 4 52 153 2 853 59.75 13 162 20 71.61 91 551 50 113 940 57 174 20 3,214 62.00 (1) 5 584 - 289 13 289 - 12 - 1 49 - 3 ---17 57 151 3,457 66.67 115 48 1,093 436 448 82.90 103 4,175 87 59.89 31 1,246 118 5 23 21 993 79.74 **5** 34 3 18 60 48.34 127 4 396 41 8 57.15

EXPENDIT TRE

		1952				
Waterloo (Continued) Villages	General Government	Protection to Persons	olic	Sanitation &	Recreation & Community Service	Conservation
under 2,000 (3)	14	17	20	2	6	1
Townships-Rural Waterloo 2,000-4,999 (4) Total Municipalities County of Waterloo Adjustments-County Rates Grants-Municipalities to	31 33 638 46	25 7 1,137 61	81 175 896 369	(1) (1) 546	431	6 3 614
County Utilities and Other						
Enterprises	7/13				functions are not	
NET TOTAL WATERLOO	684	1,198	,265	546	431	614
Wellington			Photo in the second sec			
City Guelph Towns	143	315	129	80	91	34
2,000-4,999 (2) under 2,000 (2)	33 13	33 17	39 21	12 6	9 14	5 1
Villages under 2,000 (5)	24	24	27	5	6	1
Townships-Rural 2,000-4,999 (5) under 2,000 (7) Total Municipalities County of Wellington	33 27 273 57	7 12 408 39	220 232 668 629	103	2 2 124	5 2 48 25
Adjustments-County Rates Grants-Municipality to		- 39	- 32			
County Utilities and Other						
Enterprises						
NET TOTAL WELLINGTON	330	408 1	,265	103	124	73
NET TOTAL-UPPER GRAND RIVER REGION	1,221	1,975 3	,687	748	669	754
THIC TOTA						-

	EXPENDITURE 1952									
Public O Welfare	Education (School Levies, Etc.)	Net O Debt Charges	why Utilities & Other Ot	Capital Expenditure out of Revenue	County O Rates	o Other	\$ OOOT	Per Capita		
1	54	16		1	18	1	151	38.42		
5 10 206 98 	167 278 2,512 22	7 8 723 	5	1 169 	59 136 314 - 312	3 39 212 29 	385 694 8,403 625 - 312 - 105	40.33 40.23 65.19		
			- 2		en en		<b>-</b> 2			
304	2,534	723	3	169	2	136	8,609	66.79		
191	493	124		108		11	1,719	60.06		
2	86	31	14	4	51	2	311	54.48		
1	39	8			25	13	158	50.62		
3	<b>5</b> 5	7	24		31	4	211	<b>5</b> 1. <b>3</b> 9		
6 4 207 124 	260 <u>244</u> 1,177 12	1 9 180 11	37	3 8 123 120	187 206 500  500	13 3 46 22 - 1	746 749 3,894 1,039 - 500 - 84	55.97 69.17 59.26		
			- 37	war 4rd	~ =		- 37			
319	1,189	191		243		67	4,312	65.62		
271	1, 662	1 002	20	469	2	202	16,378	66.45		
774	4,663 <del></del>	1,093		409		303	TO,210			

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY,
DEBT (Debenture, Bank Overdraft and Temporary Loans)
1952

		Density-	Tax	Levy	Debt	
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total \$1000	per Capita
Bruce		_	,	·		
Towns 2,000-4,999 (2)	6,001	2.13	234	38.97	1,001	166.87
under 2,000 (4)	6,931	2.56	269	38.76	1,057	152.54
Villages	E 011	1.27	175	33.64	631	121.18
under 2,000 (9) Townships-Rural	5,211	T.021	エリノ	22.04	0,1	121.10
2,000-4,999 (2)	5,002	0.04	245	49.02	53	10.68
under 2,000 (14)	16,912	0.02	906	53.57 45.66	2,969	13.39
Total Municipalities County of Bruce	40,001	0.04	1,000	.,,	126	3.15
Adjustments-County Rates						
Grants-Municipalities to County						
Utilities						
NET TOTAL BRUCE	40,057	0.04	1,829	45.66	3,095	77.29
Dufferin						
Town	0.1.00	0.10	71.1.	l.o. ob	1 127	220 EE
Orangeville Villages	3,420	2.19	144	42.24	1,137	332.55
under 2,000 (2)	1,924	2.32	72	37.21	59	30.70
Townships-Rural	0.00.7	0.02	00	hr 15	66	29.27
Melancthon under 2,000 (5)	2,241 7,021	0.03	92 397	41.15 56.55	64	9.07
Total Municipalities	14,606	0.04	705	48.29	1,326	90.76
County of Dufferin					167	11.45
Adjustments-County Rates Grants-Municipalities to						
County						
NET TOTAL DUFFERIN	14,606	0.04	705	48.29	1,493	102.21
Grey						
City	. (	0.00	000	CO 70	700	1.77 76
Owen Sound Towns	16,724	8.23	983	58.78	789	47.16
2,000-4,999 (2)	7,253	19.50	300	41.42	1,072	147.81
under 2,000 (2)	2,865	1.84	110	38.52	475	165.75
Villages under 2,000 (6)	3,395	1.27	112	32.92	523	154.06
Townships-Rural					06	1 00
2,000-4,999 (6) under 2,000 (10)	13,155 16,584	0.03	574 716	43.60 43.15	26 138	1.99
Total Municipalities	59,976	0.06		46.60		150.40
County of Grey						
Adjustments-County Rates Grants-Municipalities to						
County						
NET TOTAL GREY	59,976	0.06	2,795	46.60	3,023	50.40
		Annual system demonstration of				
Huron						
Towns			- O	-1 - (	3 000	000 50
Goderich	5,252	5.25	284	54.16	1,228	233.72

Real Property and Business Tax \$'000	and	Licences and	Utilities and Other Enterprises (Net)	County	Other Revenue	Amount	per Capita
234 268	37 38	3 5	1 6		17 31	292 348	48.61 50.22
169	30	1		***	7	207	39.78
243 832 1,746	78 325 508 229 	2 10 21 1	<del></del> 	369 - 369	6 33 94 109	329 1,200 2,376 708 - 369 - 13	65.80 70.94 59.32
1,746	724	22	~ 7		203	- 7 2,695	67.30
Andrews and Antonion							
144	14	2	40 M		14	174	50.98
67	5	(1)			12	84	43.45
92 393 696	29 116 164 100	1 5 8 (1)	  	178 - 178	1 9 36 6	123 523 904 284 - 178 - 5	54.78 74.57 61.91
696	259	8			42	1,005	68.84
971	61	29			61	1,122	67.08
300 110	40 11	3 -			13 67	356 189	49.05 65.84
111	13	1			9	134	39.45
556 669 2,717	169 228 522 347 - 65	6 8 48 (1)		436 - 376	13 22 185 22	744 927 3,472 805 - 376 - 65	56.56 55.91 57.88
2,717	804	48		60	207	3,836	63.94
284	40	2			20	346	65.88

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debenture, Bank Overdraft and Temporary Loans) 1952

		Density	Ta	k Levy	Deb	t
	Assessed Population	Assessed Population per Acre	Total \$'000	per Capita \$	Total \$'000	per Capita \$
Huron (continued)						
Towns 2,000-4,999 (4)	10,018	3.77	422	42.16	2,004	200.04
Villages	20,020					
under 2,000 (3)	2,253	2.27	108	47.81	212	93 • 99
Townships-Rural	E 050	U . O4.	270	51.27	71	13.47
2,000-4,999 (2) under 2,000 (14)	5,259 22,226	0.03	1,311	58.99	310	13.93
Total Municipalities	45,008	0.06	2,395	53.22	3,825	84.96
County of Huron	727					
Adjustments-County Rates						
Grants-Municipalities to						
County NET TOTAL HURON	45,008	0.06	2,395	53.22	3,825	84.96
		After the Control of				
Simcoe Towns						
Barrie	13,721	8.42	680	49.59	2,086	152.00
Orillia	12,278	6.45	555	45.22	2,826	230.19
Midland	7,480	5.23	374	49.97	589	78.70
Collingwood	7,468	1.90	319	42.75	1,658	221.97
2,000-4,999 (2)	7,109	3.28	229	32.17	745	104.73
Stayner	1,273	1.19	49	38.53	41	31.98
Villages	7,282	1.28	326	44.80	683	93.83
under 2,000 (9) Townships-Rural	1,202	1.20	520	77.00	005	73.43
Orillia	7,043	0.11	138	19.60	36	5.17
2,000-4,999 (12)	35,075	0.05	1,509	43.02	698	19.89
under 2,000 (3)	2,992	0.03	142	47.59	68	22.59
Total Municipalities	101,721	0.11	4,321	42.49	9,430	92.69
County of Simcoe					115	1.13
Adjustments-County Rates Grants-Municipalities to						
County						
Utilities						
NET TOTAL SIMCOE	101,721	0.11	4,321	42.49	9,545	93.82
NET TOTAL-BLUE WATER	261,368	0.06	12,045	46.09	20,981	80.27
REGION	#PROMISSION OF THE PROPERTY AND THE PROP	Makes was did All and Parket Analogies all and				

Real Property	Grants		Revenue Utilities and	County	ga. ech dad dan ode das den sen ars		tal
and	and	and	Other Enterprises	Rates	Other	10	per
Business Tax	Subsidies		(Net)		Revenue	Amount	Capita
\$1000	\$1000	\$ '000	\$1000	\$1000	\$ 1000	\$1000	\$
422	47	3			19	491	48.99
97	8	(1)	0.0		4	109	48.24
245	86	2			5	338	64.31
1,185	350	9			27	1,571	70.69
2,233	531	16			75	2,855	63.43
	256	(1)		487	55	798	
No. 4a	2.2			- 486	~ ~	- 486	
er es	- 11				~ ~	- 11	
2,233	776	16		1	130	3,156	70.11
6-0							
678	74	12	***	W 40	49	813	59.26
555 373	51 39	13	12	der sin	17 36	648	52.78
319	39 37	5 8			34	453 398	60.51 53.23
227	32	2	en en		18	279	39.25
49	5	(1)	(1)		2	56	44.33
317	48	8			23	396	54 . 34
5-1	,-						
131	43	4			2	180	25.57
1,456	474	18			52	2,000	57.01
140	76	1 773			4	221	73.84
4,245	879 364	71	12	838	237 48	5,444	53.51
	304	Τ.		- 822	40	1,251 - 822	
	- 55			- 022		<b>-</b> 55	
			-12			- 12	FF. 0.F
4,245	1,188	72		16	285	5,806	57.07
						ep-plan-gl-p-plan-	
11,637	3,751	166		77	867	16,498	63.12

	E	XPENDITURE 1952				
	Government	Protection to Persons & Property	& Public Works	& Sanitation & ON Waste Removal	Generation & Community Service	c   Conservation
Bruce Towns 2,000-4,999 (2) under 2,000 (4)	<b>3</b> 9 36	37 40	64 63	8 17	9 21	2 5
Villages under 2,000 (9)	21	26	39	3	3	1
Townships-Rural 2,000-4,999 (2) under 2,000 (14) Total Municipalities	10 62 168	6 31 140	134 488 788	(1) 1 29	14 14 14 1	1 8 17
County of Bruce Adjustments-County Rates Grants-Municipality to County	62 	45	410			26  
Utilities & Other Enterprises		mp est	~ ~		~ -	
NET TOTAL BRUCE	230	185	1,198	29	41	!+3
Dufferin Town						
Orangeville Villages	17	23	31	6	6	3
under 2,000 (2) Townships-Rural	8	8	6	4	5	l
Melancthon under 2,000 (5) Total Municipalities County of Dufferin	5 21 51 20	2 10 1 <sub>4</sub> 3 16	55 194 286 228	(1)	(1) 2 13	2 (9
Adjustments-County Rates Grants-Municipalities to	~ en	(1)				
County NET TOTAL DUFFERIN	71	59	514	10	13	16
Grey						
Owen Sound	91	163	110	42	53	35
Towns 2,000-4,999 (2) under 2,000 (2) Villages	35 12	34 18	56 15	7 2	15 7	(1)
under 2,000 (6) Townships-Rural	14	14	15	2	5	<i>ć</i> .
2,000-4,999 (6) under 2,000 (10) Total Municipalities County of Grey	32 42 226 52	11 17 257 39	266 377 839 486	(1)  53	4 5 89	6 9 62
Adjustments-County Rates Grants-Municipalities to	<i></i>		- 38	~ ~		
County NET TOTAL GREY	278	296	1,287	53	89	De:
		-				The state of the s

(b) Grant from Owen Sound, not classified.

Public Owelfare	Education (School Levies, Etc.)	Net Debt Charges	Wtilities  We other Enterprises (Net)	ch Capital	County	october (other	Amount 1	Capita
6 2	69 80	19 37	00 00 80 00	4 5	34 35	3 4	294 <b>3</b> 45	49.04
5	56	8	7	(1)	26	5	200	38.32
3 6 22 116 	113 330 648 17	3 12 79 12	7	23 32 28	53 221 369 -369	1 9 22 4	328 1,195 2,362 720 -369 - 13	65.52 70.68 58.97
			- 7	60 mg			- 7	
125	665	91	(1)	60		26	2,693	67.24
STERNING CONTROL OF THE PARTY O		Martin Conference on the Confe						
3	45	18	2		24 .	1	179	<b>52.3</b> 6
2	25	4	2	3	12	1	81	42.01
3 3 11 22 	144 165 279 1	25 25 23	14	19	31 111 178  -178	1 1 4 6 	143 530 933 325 -178 - 5	63.88 75.52 63.90
29	280	48	4	22		9	1,075	73.65
35	459	61		13		50	1,112	66.48
4 2	103 28	13 5	3		58 21	<b>3</b> 69	338 182	46.66 63.54
1	39	11		6	23	1	133	39.31
5 3 50 118 	221 290 1,140	5 8 103 1	3	35 11 65 72	146 172 420 -376	15 5 143 34  -15(b)	746 939 3,450 802 - 376 - 65	56.73 56.60 57.53
155	1,140	104	3	137	1111	162	3,810	63.55
						-		

		1952				
Huron Towns	64   General   Government	Protection to to Dersons and Persons	Public C Works	69 Sanitation and Owste Removal	Recreation & Community	Conservation of Health
Goderich 2,000-4,999 (4) Villages	21 56	33 64	72 73	8 17	26 28	4 1
under 2,000 (3) Townships-Rural	13	10	10	1	3	(1)
2,000-4,999 (2) under 2,000 (14)  Total Municipalities County of Huron Adjustments-County Rates Grants-Municipalities to	12 70 172 47	23 134 46	126 540 821 443	1 5 32	1 7 55  	1 10 24 
County NET TOTAL HURON	219	180	1,264	32	65	34
Simcoe Towns	erica in principal de la companya de	Calculate Annual Calcul			gli riggiringarina diminipanipliri ripi	
Barrie Orillia Midland Collingwood 2,000-4,999 (2) Stayner	52 54 34 48 19	83 91 51 59 31 6	96 92 67 50 31 7	49 10 9 8 14 3	28 21 21 9 5 4	13 8 6 2 7 (1)
Villages under 2,000 (9)	1+1+	1+1+	67	12	8	2
Townships-Rural Orillia 2,000-4,999 (12) under 2,000 (3) Total Municipalities	14 114 10 396	3 49 2 419	54 651 119 1,234	2 10  117	16 1 113	1 19 1 59
County of Simcoe Adjustments-County Rates Grants-Municipalities to	57 	92	521			60 
County Utilities and Other		~ *	NA 94			
Enterprises NET TOTAL SIMCOE	453	511	1,755	117	113	119
NET TOTAL - BLUE WATER REGION	1,251	1,231	6,018	241	321	274

	· · ·		EXPEND 195	ITURE 2				
	cation chool Levies,Etc.		8 8 8 8	ure	Rates		Tota	31
Public Welfare	Education (School Levies	Net Debt Charges	Utilities & Other Enterprises (Net)	Capital Expenditure		Other	Amount	Per Capita
\$1000	\$ 1000	\$1000	\$1000	\$1000			\$1000	\$
5 4	104 124	19 45		18	43 62	8 14	343 506	65.34 50.51
2	34	3		12	15	9	112	49.99
2 6 19 121 	106 499 867 26	8 28 103 5 	30 30	10 40 25	60 306 486 - 486	14 16 61 63	335 1,544 2,840 800 - 486 - 11	63.74 69.48 63.13
129	893	108	30	65		124	3,143	69.83
		Manufacture and the second		************		-	No. of Concession, Name of	
22 16 16 18 23 1	243 193 130 117 79 15	64 65 38 22 23 (1)		40 (1) 9 19 4 4	107 89 63 47 31 9	15 6 8 5 4 (1)	812 645 452 404 271 56	59.19 52.57 60.45 54.05 38.15 44.11
11	103	15	11	8	54	7	386	53.05
6 41 1 155 369  - 55	64 587 59 1,590 5	3 23 3 256 9	13	48 (1) 132 50	29 373 31 833  - 822	41 2 88 70 	176 1,974 229 5,405 1,233 - 822 - 55	25.06 56.27 76.68 53.15
			- 12				- 12	
469	1,595	265	1	182	11	158	5,749	56.53
907	4,573	616	38	466	55	479	16,470	63.03

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density of	Tax	Levy	Debt	
	Assessed	Assessed		per		per
	Population	Population	Total	Capita	Total	Capita
Durham		per Acre	\$1000	\$	\$1000	\$
Towns						
Port Hope	6,400	6.13	282	44.05	564	88.05
Bowmanville	5,431	2.24	232	42.71	776	1.42.92
Villages under 2,000 (2)	1,679	0.71	47	28.06	23	13.72
Townships-Rural		·				
Darlington	5,500	0.08	152	27.70	132	23.91 10.24
2,000-4,999 (2) under 2,000 (3)	5,163 4,923	0.04	217	42.12	53 43	8.76
Total Municipalities-		0.05				
Durham	29,096	0.08	1,149	39.51	1,591	54.66
Northumberland Towns		Security Sec		***************************************		
Cobourg	8,117	2.75	322	39.67	1,056	130.04
Campbellford	3,133	5.22	111	35.53	197	62.98
Villages under 2,000 (3)	3,846	0.89	119	30.84	185	48.16
Townships-Rural				5	,	
2,000-4,999 (5)	13,425	0.06	456	33.97	192	14.28
under 2,000 (4) Park Commission	4,944	0.06	209	42.35	101	20.41
Presqu'ile	140	0.40	a	8.	a	a
Total Municipalities- Northumberland	22 605	0.10	1,217	26 22	1,731	51.50
NOT OHAMBET TAME	33,605	0.10	ا کے و ک		T, 131	71.70
Total Municipalities-	(0.70)	2.00	0 266			52.96
Northumberl'd & Durham United County-	62,701	0.09	2,366	31.12	3,322	72.90
Northumberl'd & Durham					60	0.96
Adjustments-County Rates						
Grants-Municipalities to County						
Utilities						
THE THOUSANT MODERNIA TARON MICH.	60 703	0.00	2,366	27 75	3,382	53.92
NET TOTAL NORTHUMBERLAND & DURHAM	62,701	0.09	2,300	31.12	3,302	73.72
		Visitation and Visitation				Secretario de la constitución de
Ontario						
City Oshawa	41,631	3.87	2,247	53.98	5,734	137.73
Towns	41,001	3.01	29641	73.70	7,104	±31.12
Whitby	7,619	2.12	254	33.29		76.43
Uxbridge Villages	1,841	5.50	100	54.51	278	151.17
under 2,000 (3)	3,712	2.57	150	40.30	556	149.72
Townships-Rural						0= 06
Pickering 2,000-4,999 (5)	10,936	0.17	383 447	35.02 35.13		85.86 35.83
under 2,000 (5)	12,722 5,363	0.04	233	43.49		46.48
Improvement District-	4,710	1.83	207	43.95		
Ajax Total Municipalities	88,534	0.18	4,021	15 10	8,794	99.33
County of Ontario	00,734	0.10	7,021	47.42	626	7.07
Adjustments-County Rates						
Grants-Municipalities to						
County NET TOTAL ONTARIO	88,534	0.18	4,021	45.42	9,420	106.40
1,272 W 0 W 1 CO						

Real Property and Business Tax	Grants and Subsidies \$ 1000	Licences and Permits	Revenue Utilities and Other Enterprises (Net)	(Net)	Other Revenue	Amount	tal per Capita
Ψ 000	\$ .000	\$1000	\$1000	\$ 1000	\$ 1000	\$ 1000	\$
282 232	51 27	2	6 <del></del>		16 3	357 263	55.77 48.42
47	5	(1)		son son	2	54	32.20
151 212 208	33 63 56	1 3 2			2 13 7	187 291 273	33.98 56.32 55.44
1,132	235	9	6		43	1,425	48.96
entri i communication de la communication de l		-		emmonthy divisions	===		
321 111	33 16	7	6		46 <b>5</b>	407 139	50.18 44.27
118	22	1	tion this		5	146	37.98
446 201	146 70	6 2			8 6	606 279	45.18 56.40
а	a	8.	a		8.	8.	a
1,197	287	17	6		70	1,577	46.94
2,329	522	26	12		113	3,002	47.88
	218	(1)		444 -441 	36	698 - 441 - 18	
			- 1	40 100		1	
2,329	722	26	11	3	149	3,240	51.66
2,247	183	52			86	2,568	61.67
254 100	55 13	2 1	00 val		16 9	327 123	42.87 66.79
145	18	1	~ ~		9	173	46.70
381 443 231 198	72 108 51 59	8 6 3 3	  		11 13 13 6	472 570 298 266	43.17 44.79 55.61 56.52
3,999	559 304 -72	76 (1)		366 - 366	163 103	4,797 773 - 366 - 72	54.18
3,999	791	76	Gr etc	Di Di	266		57.96

### REVENUE 1952

		Licences	Utilities and		013	Tot	
and Business Tax \$ '000	and Subsidies \$'000		Other Enterprises (Net) \$1000	(Net)	Other Revenue \$'000	Amount \$1000	per Capita
Ψ	Ψ	4	¥	,	¥	*	,
2,683	162	15	600 600	40 00	189	3,049	79.42
124 271 <u>3</u> 47	19 78 <u>58</u>	1 4 3	ern ern ern ern ern den	ado eta do eta esta eta esta eta	11 16 18	155 369 426	38.36 44.85 49.47
3,425	317 279	23 (1)	e- e-	254 - 254	234 24	3,999 557 - 254	67.47
	- 86		en en		***	- 86	
3,425	510	23	geologica, conspiciore presi disc	100 FEB.	258	4,216	71.11
			gargarya ha Anda Malantari Anda		-		
402	30	5	an 44		22	459	47.05
97	14	1.	2	100 100	6	120	34.54
206 341 1,046	149 109 202 146	12 (1)	2	275 - 268	8 20 56 56	265 474 1,318 477 - 268 - 10	54.92 57.06 50.00
1,046	338	12	2	7	112	1,517	57.56
		displacement sense of	the season of the contract of	-			
10,799	2,361	137	13 American and an another an another and an another an	10	785	14,105	59.54

### REGION 10 - KAWARTHA

	n Etc.		s s s	ture			Tot	al
erpublic OWelfare	e Education (School	w Net o Debt O Charges	wutilities &	Capital Expendit	G Rates	\$ Other	\$ 000 360	Scapita Capita
3 3	114 101	20 17	(1)	an to	32 29	16	275	50.73
1	22	2	dec and		8	1	58	34.48
2 2 4 15	73 99 89 498	1 2 2 44	(1)	7	34 58 57 218	1 9 2 31	195 294 278 1,460	35.43 56.93 56.48 50.18

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

	Density	Tax	Levy	Deb	t
Assessed Population	Assessed Population	Total			per Capita
	per Acre	\$ -000	Ф	\$.000	Ф
38 300	20 10	0 605	70.00	7 661.	100 60
30,392	16.44	2,090	10.20	1,004	199.02
4.051	3.17	124	30.65	1.95	48.05
	0.02	285	34.71	138	16.80
8,611	0.05	351	40.80	265	30.73
59,279	0.11	3,455	58.30	8,262	
				864	14.58
50 270	- <u> </u>	2 1.55	EB 20	0.106	1 = 0
22,612	0.11	3,477	50.30	9,120	173.74
9,753	9.01	402	41.21	870	89.21
3,464	1.32	97	27.93	49	14.02
1, 816	0 01	000	1.0.20	(0	30.00
					12.87
					40.52
,,,,,		_,5	, 37	,	52.99
				- / - / -	
26,337	0.05	1,063	40.35	2,463	93.51
236,851	0.10	10,905	46.05	24,391	102.97
	38,392 4,051 (9)8,225 8,611 59,279	Assessed Population Per Acre  38,392 12.44  4,051 3.17 (9)8,225 0.02 8,611 0.05 79,279 0.11  9,753 9.01 3,464 1.32 4,816 0.04 8,304 0.02 26,337 0.05	Assessed Population Population Population Per Acre  38,392  12.44  2,695  4,051  0.02  8,611  59,279  0.11  3,455   9,753  9,753  9,01  4,02  3,464  1.32  97  4,816  8,304  0.02  3,663  0.04  208  8,304  0.02  3,663  0.05  1,063	Assessed Population Per Acre Population Per Acre \$'000 \$  38,392	Assessed Population per Acre   Total   Total   Total   \$\frac{1}{5}\]   12.44   2,695   70.20   7,664   2,695   34.71   138   3.17   124   30.65   195   3.17   124   30.65   195   3.17   124   30.65   195   3.17   138   3.17   138   3.17   138   3.17   3.17   138   3.17   3.17   3.17   3.18   3.17   3.18   3.17   3.18   3.17   3.18   3.17   3.18   3.

### REGION 10 - KAWARTHA

Durham Towns	General	Protection to Persons and Property	Public Works	Sanitation & Waste	Recreation of & Community	Conservatio
Port Hope	36	38	70	13	15	3
Bowmanville	22	30	55		13	3
Villages under 2,000 (2)	6	7	8	(1)	2	1
Townships-Rural	13	4	54			6
Darlington 2,000 - 4,999 (2)	16	1	106	(1)	to 40	1
under 2,000 (3)	18	3	100	í	(1)	2
Total Municipalities-	111	83	393	14	30	16
Durham						

		±7) ⊂				_
Northumberland Towns	deneral Government	HProtection of to Persons of and Property	Public O Works	A Sanitation & Waste O Removal	Recreation o Services	Conservation of the State of th
Cobourg Campbellford	37 13	49 .16	62 25	19 5	28 4	1 3
Villages under 2,000 (3) Townships-Rural	11	14	30		2	2
2,000-4,999 (5) under 2,000 (4) Park Commission	26 12	7 3	244 115	1	5 1	3
Presqu'ile Total Municipalities- Northumberland	99	89	476	a 	40	13
Total Municipalities- Northumberland & Durham United County-	210	172	869	39	70	29
Northumberland & Durham Adjustments-County Rates Grants-Municipalities to	52 	57  	357		00 00 00 00 00 00	39
County Utilities NET TOTAL NORTHUMBERLAND & DURHAM	262	229	1,226	39	70	68
Ontario City Oshawa	197	478	238	124	118	80
Towns Whitby Uxbridge	32 14	39 10	66 12	20 6	7 1	3
Villages under 2,000 (3) Townships-Rural	15	15	27	14	6	1
Pickering 2,000-4,999 (5) under 2,000 (5) Improvement District	33 37 25	39 15 6	110 162 80	(1) 1 2	1 3 4	11 6 2
Ajax Total Municipalities County of Ontario Adjustments-County Rates	11 364 42	47 649 75	39 734 395	17	144	108
Grants-Municipalities to County NET TOTAL INTARIO	406	<b>-</b> 27	- 7 1,122	174	144	108
Peterborough City						
Peterborough Villages	173	462	280	97	141	91
under 2,000 (3) Townships-Rural	13	18	26	7	5	2
2,000-4,999 (3) under 2,000 (9) Total Municipalities County of Peterborough	25 33 244 15	9 3 492 74	97 111 514 273	106	(1) 146	2 5 100
Adjustments-County Rates Grants-Municipalities to Cou NET TOTAL PATERBOROUGH	259	- 23 543	787	106	146	100
Note: For Victoria County	and Net To	otal Kawarth	a Region	, see end	of section	٠

	EXPENDITURE 1952								
Public O Welfare	Education (School Levies, Etc.)	Net Columbt Charges	Whilities  & Other Enterprises (Net)	Capital Expenditure Out of Revenue	County O Rates	\$ Octher	cool Amount	per capita	
6	96 39	51 12		(1)	39 16	(1)	399 139	49.14 44.38	
6	40	8	1		19	2	135	35 - 23	
7 5	203 93	10 2	60 00 60 40	40 40 40 40	104 45	11 (1)	622 279	46.31 56.38	
30 ====	471	- 83 	_a1	(1)	223	214	a 1,577 <sub>+</sub>	46.83	
45	969	127	1	7	441	55	3,034	48.39	
158  - 18	2		en en en en		- 441	12	677 - 441 - 18		
185	971	127	and I	7	dip No	67	3,251	51.84	
109	837	149		174		95	2,599	62.42	
1 1	81 25	20 19		11	48 12	(1)	330 101	43.34 55.05	
1	51+	3	6	6	25	13	176	47.51	
7 12 4	186 191 100	1 1 1		1 25 4.	73 124 61	14 13 4	476 590 293	43.48 46.36 54.56	
() 135 205 - 35	1,551	13C 46 		30 251	32 375 - 366	3 144 18 - 2	266 4,831 783 - 366 - 72	56.52 54.56	
305	1,553	24:	ć	251	9	160	5,176	58.40	
94	932	368	264	Alpe des		55	2,957	77.03	
3	40	Ó	** =	60 00	31	5	156	38.48	
11 4 1. '	152 106 1,6; 13	388 75  - 55	264	7 7	125 98 254 - 254	2 10 72 45	431 379 3,923 538 - 254 - 86	50.04 46.14 66.19	
147	1,243	7,02	204	-		7	7,202	59.52	

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdrafts and Temporary Loans)

		Density- of	Tax	Levy	Debt	
	Assessed Population	Assessed Population per Acre		per Capita	Total \$'000	per Capita
Frontenac City Kingston	43,845	7.12	2,338	53.32	5,348	121.98
Townships-Rural 2,000-4,999 (2) under 2,000 (13) Total Municipalities County of Frontenac Adjustments-County Rates	6,429 11,844 62,118	0.07 0.02 0.09	256 355 2,949	39·79 29·97 47·47	381 369 6,098 579	59.28 31.17 98.18 9.32
Grants-Municipalities to County NET TOTAL FRONTENAC	62,118	0.09	2,949	47.47	6,677	107.50
Hastings City Belleville	19,592	13.63	1,233	62.93	3,318	169.34
Separated Town				54.65	865	85.81
Trenton Town	10,086	7.99	551			
Deseronto Villages	1,570	3.02	59	37.55	65	41.39
under 2,000 (7)	8,254	2.66	259	31.34	1,184	143.43
Townships-Rural Thurlow Sidney 2,000-4,999 (3) under 2,000 (13) Total Municipalities County of Hastings Adjustments-County Rates Grants-Municipalities to	7,047 5,814 6,445 10,652 69,460	0.14 0.09 0.03 0.01 0.07	255 169 310 297 3,133	36.21 29.00 48.16 27.93 45.11	293 105 81 115 6,026 615	41.52 18.13 12.59 10.80 86.76 8.85
County NET TOTAL HASTINGS	69,460	0.07	3,133	45.11	6,641	95.61
Lennox & Addington Town						
Napanee Villages	3,863	2.93	177	45.94	493	127.61
under 2,000 (2) Townships-Rural	849	0.16	31	35.99	31	36.58
2,000-4,999 (2) under 2,000 (8) Total Municipalities	5,602 7,498 17,812	0.04	226 266 700	40.30 35.52 39.31	122 202 848	21.83 26.98 47.64
County of Lennox & Addington Adjustments-County Rates Grants-Municipalities to County NET TOTAL LENNOX &		0.04		39.31	983	55.19
ADDINGTON  Prince Edward	17,812			39.31	===	=====
Town Picton	4,103	7.39	247	60.25	673	164.06

		. The contract day from the contract day and the co	Revenue				
Real Property	Grants and	Licences	Utilities and	Count		To	tal
Business Tax	Subsidies	and Ot Permits	ther Enterprises (Net)	(Net)	Other Revenue	Amount	per Capita
\$1000	\$ '000	\$1000	\$1000	\$1000	\$1000	\$1000	\$
2,338	220	62		***	184	2,804	63.95
253	22	2	w m		7	284	44.18
351 2,942	177	<u>5</u> 69			7 198	540 3,628	45.60
-, -, -	63	(1)		216	5	284	20.40
To 40	- 50	~ ~		- 216	***	- 216	
				tita eta	49 40	- 50	
2,942	432	69			203	3,646	58.68
Authorization dealers in regression White distances on recommental physics	Printerson and the second	And the second s					
1,218	110	15	3	/	95	1,441	73.53
551	49	19			24	643	63.71
<b>5</b> 9	7	(1)	en ape		4	70	44.38
255	29	2	1		25	312	37.86
255	1+3	3	en de		4	305	43.34
169 299	26 <b>83</b>	]			3	199	34.15
289	165	3 4			18 22	403 480	62.50
3,095	512	47	4		195	3,853	55.47
	299	(1)	en en	392 - 370	13	704 - 370	
60 66	- 46	an do	ndor dito	210		- 46	
3,095	765	47	4	22	208	4,141	59.62
						-	-
177	25	10			5	217	56.17
30	2	(1)	2	orie day	3	37	44.04
224	49	2	OP No.		9	284	50.72
264	84	<u>3</u> 15			17	368	49.12
695	160 201	(1)	2	236	34 7	906 444	50.91
		, ,					
	- 70			- 234		- 234 - 70	
695	291	15	2 -	2	41	1,046	58.77
-							
01:17	102	2			0	280	93.03
247	123	3	gia sai		9	202	93.03

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdrafts and Temporary Loans) 1952

a Total Capita \$ 1000
6 24 14.32
38 7,21 5 17 3.18 3 752 45.59 102 6.17
3 854 51.76
Recreation & Community Services Conservation of Health
\$1000 \$1000
87 149
(1) 3 2 8 89 160
89 160
73 59
17 14
1 (1)
11 3
1 5 1 2 2 5

			Re	venue	~~~			
Real P	roperty Gr	ants Li		lities and		044	Tota	
	ss Tax Su	bsidies Pe	ermits	(Net)	(Net)	Other	Amount C	
Φ.Ο		\$ '000 \$	1000	\$ 1000	\$1000	\$1000	\$ '000	\$
!	57	3	(1)	The star		1	61	37.12
18	89	25	2			1		40.96
2	<u>28</u> 21	34 185	2			4	268	49.07
		115	(1)		272	15 19	406	56.21
		- 6			- 57 		- 257 - 6	
-								
72	21	294	7	00 to	15	34	1,071	64.81
		-						
			REGION	11 - QUIN	TE			
			EXP.	ENDITURE				
	$\widehat{}$			1952				
	ducation School Levies,Etc.		S S S	Capital Expenditure out of Revenue			To	tal
icare	Education (School Levies,E	80	Utilities & Other Enterpris (Net)	tal endi	es s	£i 0)	unt	per Capita
Public Welfare	Educati (School Levies	Net O Debt	Util & Ot Ente	Capital Expendi out of Revenue	County	Other	Amount	per Capi
\$1000	\$1000	\$1000	\$1000	\$'000	\$1000	1000	\$1000	\$
160	988	334		99	ter etc	42	2,778	63.35
6 14	91 97	4 5	3 2	2 18	102 115	17 3	288 544	44.73 45.90
180	1,176	343	5	119	217	62	3,610	58.10
47	34	37			- 216	 jt	293 <b>-</b> 216	
44 00					***	- 50	- 50	
227	1,210	380		119	1	16	3,637	58.52
58	400	163				45	1,425	72.74
26	237	66		19		37	639	63.37
1	16	6		1	8	9	73	46.19
),	87	33	~~	6	47	3	308	37.31
11	111	17	ser sin		74	(1)	301	42.72
3 9 7	77 133	1		1 13	57 109	5 (1)	192 404	32.98 62.60
7	115			4	75	2	480	45.02

		EXPENDITURE 1952				
	General	Protection of to Persons of & Property	Public O Works	Sanitation &	Recreation & Community Services	Conservation
Hastings (continued) Total Municipalities County of Hastings Adjustments-County Rates Grants-Municipalities to Cou NET TOTAL HASTINGS Lennox & Addington	250 29 nty 279	426 81 - 25 482	745 339 - 7 1,077	103	105	89   89
Town Napanee Villages under 2,000 (2)	16 4	28	19 4	11 (1)	3 (1)	3 (1)
Townships-Rural 2,000-4,999 (2) under 2,000 (8) Total Municipalities Co. of Lennox & Addington	18 19 57 23	5 2 38 30	70 125 218 242	(1) (1) 11	1 5 9	(1) 3 14
Adjustments-County Rates Grants-Municipalities to County NET TOTAL LENNOX AND ADDINGTON	80		460	11	  9	17
Prince Edward Town Picton Villages	10	24	149	7		2
under 2,000 (2) Townships-Rural 2,000-4,999 (2) under 2,000 (5)	5 9 14	4 2 3	1 31 59	(1) (1)	(1) (1)	1 2 2
Total Municipalities County of Prince Edward Adjustments-County Rates Grants-Municipalities to County	38 13 	33 28 	240 135	9		7 12
NET TOTAL PRINCE EDWAR	D 51	1,120	375 2,469	9	205	19
		1,100				

	<u>:</u>			1952				
Public OWelfare	Education (School Levies, Etc.)	Whet Obebt Ocharges	Utilities  % Other  Enterprises (Net)	Expenditure of out of Revenue	County	Other	Noor t	Per Capita
119 164  - 14 269	1,176 29  1,205	294 6   300		1414    414	370	101 ±8  119	3,822 666 - 370 - 1,6	55.01
-						119	4,072	58.61
13	61	12		2	41	1.	210	54.46
(1)	14			22	9		56	65.87
6 7 26 53	87 104 266 6	2 2 16 72 		6 30 23	90 94 234 - 234	2 2 5 9	281 366 913 472 - 234 - 70	50.09 48.78 51.24
79	272	18		53		14	1,081	60.66
		***************************************			<del></del>			
9	75	49	4	44 46	49	3	35	y2.88
1	22	14	~-	(1)	19	(1)	9T	37.15
7 2 19 78 - 6	74 87 258 32	1 54 13 	<u></u>	3  3 67 	84 105 257 - 257	(1) (1) 3 26	212 273 927 404 - 257 - 6	40.10 50.02 56.21
91	290	67	4	70	***	29	1,068	64.70
	2,977	765	9	286	1	178	9,858	59.40
And always complete decides							NA SECRETARIA DE LA CONTRACTORIO	

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

Density-----Tax Levy-----Debt-----Assessed Assessed per per Population Population Total. Capita Total Capita per Acre \$1000 \$ Dundas Villages 404 76.52 5,284 1.65 under 2,000 (4) Townships 383 585 12.92 2,000-4,999 (4) 10,497 0.05 36.53 136 15,781 34.21 0.07 Total Municipalities-Dundas Glengarry 68.38 Alexandria 2.236 6.39 82 36.77 153 Villages 48 36.94 35 27.08 under 2,000 (2) 1,297 1.78 Townships-Rural 2,000-4,999 (4) 33,256 37.84 Total Municipalities-16,789 Glengarry Stormont City Cornwall 17,026 20.64 964 56.65 1,651 96.98 Village Finch 380 0.83 14 36.65 16 43.01 Townships-Suburban Cornwall 0.36 1,178 53.05 2,638 118.77 22,211 Townships-Rural 2,000-4,999 (3) 8,891 187 20.98 0.05 42.76 Total Municipalities-4,492 92.60 48,508 0.20 Total Municipalities-Stormont, Dundas and 46.35 5,555 68.51 0.11 3,756 Glengarry United County of Stormont, Dundas and 603 7.44 Glengarry-Adjustments-County Rates Grants-Municipalities to County Utilities NET TOTAL-STORMONT, DUNDAS 81,078 3,756 46.35 6.158 75.95 0.11 AND GLENGARRY Grenville Separated Towns 3,784 417 5.91 151 39.81 110.20 Prescott Villages under 2,000 (3) 4,248 3.06 158 37.14 716 168.46 Townships-Rural 7,239 2,000-4,999 (3) 0.04 245 33.91 70 9.62 ,614 under 2,000 (2) 16,885 Total Municipalities-

Pool During			Revenue			
Real Property and	Grants and	Licences	Utilities and Other Enterprises	County		per
Business Tax	Subsidies	Permits	(Net)	(Net)	Revenue Amount	Capita
\$1000	\$ '000	\$1000	\$'000	\$1000	\$1000 \$1000	\$
202	21	2		w w	12 237	44.87
380 582	<u>96</u> 117	<del>-4</del>	TO THE RESIDENCE OF THE PERSON		8 488 20 725	46.50
	- Control Control				Statistics and the state of the	
82	22	2	5		5 116	51.67
48	6	(1)				44.00
		` '	<b>0- 10</b>			
493 623	135	6	5		14 646 22 819	48.73 48.75
					± 2000 5110	90-000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-
960	100	7			58 1,125	66.09
14	1	(1)	~~	mar dan	(1) 15	39.75
1,178	121	6			18 1,323	59.58
370 2,522	<u>76</u> 298	<u>3</u> 16	00 00 00 00 00 00 00 00 00 00 00 00 00	may too	15 464 91 2,927	52.22 60.36
3,727	578	28	5		133 4,471	55.15
3,1-1	710				233 49112	///
	430	(1)		694	34 1,158	
			co co	- 694	694	
40.40	- 98				98	
			2		2	
3,727	910	28	3		167 4,835	59.65
			-		-	
150	13	1	1		4 169	44.73
158	18	1		W7 400	5 182	42.95
244	65	3			9 321	44.28
60		~				
	- <u>28</u> 124	-1-	1		19 762	55.55 45.12

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density		ax Levy	Deb	t
Leeds	Assessed Population	Assessed Population per Acre	Total \$'000	per Capita	Total \$'000	per Capita \$
Separated Towns Brockville Gananoque Villages	12,221 4,543	7.66 3.28	726 204		1,312	
under 2,000 (3) Townships-Rural	1,864	0.97	51	27.19	54	28.79
Elizabethtown Leeds & Lansdowne Front	5,550 2,140	0.07	121 96	21.76 44.93		12.84 22.43
under 2,000 (9) Total Municipalities-	9,869 36,187	0.03	378 1,576	38.30 43.56	$\frac{34}{2,023}$	3.41 55.90
Total Municipalities-	F2 000					
Leeds & Grenville United County of Leeds & Grenville	53,072	0.07	2,190	41.27	3,226	60.77
Adjustments-County Rates Gramts-Municipality to Count Utilities	À					
NET TOTAL-LEEDS & GRENVILLE	53,072	0.07	2,190	41.27	3,226	60.77
NET TOTAL-UPPER ST. LAWRENCE REGION	134,150	0.09	5,946	44.34	9,384	69.94

### REGION 12 - UPPER ST. LAWRENCE

	Government	Protection to Persons	Public O Works	Sanitation & ON Waste Removal	Recreation & Community	Conservation of Health
Dundas Villages under 2,000 (4)	21	27	28	7	2	1
Townships 2,000-4,999 (4) Total Municipalities	20	3 30	136 164	<del></del>	1 3	4 5
Dundas Glengarry	American and a second a second and a second					
Town Alexandria Villages	6	13	23	1.	(1)	14
under 2,000 (2)	4	7	14	1	5	1.

## REVENUE 1952

Real Property	Canada		Revenue			Tota	~~~~
and	and		Utilities and her Enterprises	County Rates	Other	Tora	per
Business Tax	Subsidies	Permits	(Net)	(Net)	Revenue		Capita
\$ 1000	\$1000	\$1000	\$ '000	\$ 1000	\$1000	\$1000	\$
726 204	62 16	18	1		23 6	830	67.91
204	10	9			0	235	51.78
50	4	1			3	58	30.89
120	23	1	707 004	400 mm	4	148	26.63
95	14	1	es es	~ ~	3	113	52.61
375	107	4	saler date		13	499	50.59
375 1,570	226	34	1	er 10	52	1,883	52.02
							-
2,182	350	40	2	***	71	2,645	49.84
	245	(1)		418	14	677	
W0 60			40-40	- 418		- 418	
MD 611	- 35	00 BA				- 35	
2,182	560	40	- 2		85	2.867	54.04
	-		AND ADDRESS OF THE PARTY OF THE				
5,909	1,470	68	3		252	7,702	57.43

### REGION 12 - UPPER ST. LAWRENCE

Public   Welfare	Agucation (School Levies, Etc.)	OlCharges	O Enterprises (Net)	em Capital	County Rates	ther other other	Amount OCO	Capita PP
2	79	11	2	2	47	2	231	43.71
7 9	128	<u>19</u> 30	2	14	147	5	484	46.12
gan den Proprime gerlanderen germag	-				-	-	***************************************	-2
13	24	9	***	1.	12	1	107	47.98
1	17	4			10	3	57	43.63

		EXPENDITU 1952	RE			
	General Government	Protection to Persons	Public ON Works	Sanitation &	es Recreation & Community Strvices	Conservation of Health
Glengarry (continued) Townships-Rural 2,000-4,999 (4) Total Municipalities Glengarry Stormont	<u>28</u> 38	<u>3</u> 23	207 234	<u>(1)</u> 2	3 8	5 10
City Cornwall Village Finch	72 1	170	82 1	51	50 	37 (1)
Townships-Suburban Cornwall Townships-Rural 2,000-4,999 (3) Total Municipalities	54 16 143	114 - 3 - 288	142 114 339	42  93	3 2 55	29
Stormont  Total Municipalities- Stormont, Dundas and	Market Account of the Second Sec		emphilopping emblancy		attitution man	
Glengarry United County of Stormont, Dundas and Glengarry Adjustments-County Rates Grants-Municipalities to	222 34 	341 91  - 14	737 560  - 27	102	66	84 34 
County Utilities NET TOTAL STORMONT, DUNDAS AND GLENGARRY	<del>256</del>	418	1,270	102	66	118
Grenville  Beparated Town  Prescott	14	25	19	6	5	5
Villages under 2,000 (3) Townships-Rural 2,000-4,999 (3)	16 13	20	25 82	) <sub>4</sub>	5 1	1 5 (1)
under 2,000 (2) Total Municipalities Grenville Leeds	-5 -48	54	35 161	10	11	11
Separated Towns Brockville Gananoque Villages under 2,000 (3)	65 18 8	160 32	139 33 6	48 10 (1)	24 7 4	20 7
Townships-Rural Elizabethtown Leeds & Lansdowne Front under 2,000 (9) Total Municipalities Leeds	6 5 26 128	3 2 10 214	40 26 169 413	<u>(1)</u> 58	(1) 35	1 1 7 37

Public Welfare	Education (School Levies, Etc.)	Met Octobranges	Willities  Willities  Willities  Willities  Willities  Willities  Willities  Willities  Willities	Capital Capital Cout of Revenue	County O Rates	Other	Sount	tal
<u>15</u> 29	208 249	18		<u>25</u> 26	139	11 15	662 826	49.92 49.18
98	372	134				26	1,092	64.15
(1)	8	2			4	(1)	17	44.51
52	474	118			243	6	1,277	57.51
7 157	189 1,043	8 262		18	<u>92</u> 339	15	467 2,853	52.55 58.83
-			Secretary and the second	Andrew State Control of the Control				
195	1,499	323	2	60	694	69	4,394	54.20
299  54	30	35  - 2			- 6,04	1 <sub>4</sub> 1 <sub>4</sub> - 1	1,127 - 694 - 98	
		au 9s	- 2		an me		- 2	
440	1,529	356		60		112	4,727	58.31
and the second						Annual Control of the	-	
6	65	20	eo eo			5	170	44.93
1	58	16	19	3	19	1	188	44.17
(1) 10	77 16 216	(1) 40	19	20 23	102 26 147	11 3 20	325 87 770	44.84 53.80 45.55
				- Programmer - See				
38 14	243 86	69 18	<del></del>			2 <i>)</i> 1	8 <b>35</b> 2 <b>3</b> 0	68.36 50.73
1	19	1			10	(1)	57	30.83
2 1 4 60	45 30 109 532	(1) (1) 3 91		2 2	51 44 166 271	1 4 6 41	149 113 502 1,886	26.91 53.03 50.83 52.17

		EXPENDITURE 1952				
	General Geovernment	Protection to Persons	Public Works	Sanitation & Waste Removal	Recreation & Community Services	Conservation of Health
Total Municipalities- Leeds and Grenville	176	268	574	68	46	48 22
United Co. of Leeds & Grenvil Adjustments-County Rates	TTE 33	54	347			
Grants-Municipalities to County		- 13	- 7			
Utilities						
NET TOTAL LEEDS AND GRENVILLE	209	309	914	68	46	70
NET TOTAL - UPPER ST.						
LAWRENCE REGION	465	727	2,184	170	112	188

#### REGION 13 - OTTAWA VALLEY

## ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

	DensityTax LevyDebt of					
	Assessed	Assessed		per		per
	Population	Population		Capita	Total	Capita
		per Acre	\$1000	\$	\$1000	\$
Carleton						
City	200,936	12.10	13,713	68.25	28,200	140.34
Town	200,930	12.10	13,113	00.2)	20,200	140.54
Eastview	15,933	a	440	27.64	1,411	88.58
Villages	-2,755		, , ,	_,	-,,	
under 2,000 (2)	1,611	0.94	203	126.18	427	264.80
Townships-Suburban						
Gloucester	6,297	0.10	189	29.99	109	17.36
Nepean	4,055	0.08	212	52.28	165	40.80
Townships-Rural	2 800	0.04	162	42.65	80	21.05
Osgoode (7)	3,808 9,048	0.03	433	47.85	173	19.10
under 2,000 (7) Total Municipalities					-	126.47
County of Carleton	241,688	0.44	15,352	63.52	30,565	4.70
Adjustments-County Rates					1,137	4.70
Grants-Municipalities to						
County						
Utilities						
NET TOTAL CARLETON	241,688	0.44	15,352	63.52	31,702	131.17
Lanark						
Separated Town Smith's Falls	8,347	8.10	444	53.17	1,571	188.26
Towns	09577	0.10	-1-1-1	75-1		2,000
2,000-4,999 (3)	12,080	3.99	488	40.37	1,100	91.03
Village Lanark	806	0.79	19	23.89	3	4.09

## REGION 12 - UPPER ST. LAWRENCE

			:	EXPENDITUI 1952	RE		4	
Public   Welfare	Education (School Levies, Etc.)	Net Debt Charges	Utilities & Other Enterprises (Net)	Capital Expenditure out of Revenue	County Rates	Other	Amount L	per Capita
\$1000	\$'000	\$1000	\$1000	\$1000	\$1000	\$ 1000	\$1000	\$
70 103  - 15	748 92 	131	23  	25  	418 - 418	61 26 	2,656 677 - 418 - 35	50.08
158	840	131	- 2	25	***	87	- 2 2,878	54.28
598	2,369	487	21	85	All dis	199	7,605	56.71

### REGION 13 - OTTAWA VALLEY

Real Property and Business Tax \$'000	Grants and Subsidies \$ * 000	Licences and Permits \$'000	Utilities and Other Enterprises (Net)		Other Revenue		per Capita
13,664	3,082	139	· ·		443	17,328	86.23
440	105	8	19	the san	13	585	36.73
202	48	4			1	258	160.10
184 203	50 51	6 9			17 7	257 270	40.78 66.58
161 <u>430</u> 15,284 	46 135 3,517 574 - 240	1 171 (1)	19	396 - 389		212 582 19,492 1,014 - 389 - 240	55.77 64.28 80.65
15,284	3,851	171	- 19	7	545	- 19 19,858	82.16
1+1+1+	1+1+	4			29	521	62.40
486	51	8			26	571	47.30
19	2	(1)			1	22	27.07

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Depenture, Bank Overdraft and Temporary Loans) 1952

		Density	Tax	Levy	Debt	
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total	per Capita
Lanark (continued) Townships-Rural Montague under 2,000 (12) Total Municipalities County of Lanark Adjustments-County Rates Grants-Municipalities to	2,539 <u>11,073</u> 34,845	0.04 0.02 0.05	38 408 1,397	15.01 36.88 40.10	13 115 2,802 73	5.17 10.35 80.41 2.09
County NET TOTAL LANARK	34,845	0.05	1,397	40.10	2,875	82.50
	many and the state of the state	Management &	No. of the Company of	Authorities de magazines automos Aut. Algumin general gapanga en ins	-	
Prescott Towns Hawkesbury Vankleek Hill	7,287 1,528	6.54 2.73	274 43	37.56 28.02	348 33	47.76 21.41
Villages under 2,000 (2)	2,070	0.99	33	15.90	4	1,96
Townships-Rural 2,000-4,999 (3) under 2,000 (4) Total Municipalities	8,167 5,495 24,547	0.05 0.04 0.08	328 216 894	40.11 39.24 36.37	161 57 603	19.70 10.44 24.57
Prescott		State of the Australian State of the Control of the State	SHARLES, USA THE STATE OF STREET, ASSOCIATION OF	-trans-		Annual Publisher and Annual Pu
Russell Town						
Rockland Village	2,279	3.5		1 .79	13	5.92
Casselman Townships-Rural	1,127	1.17	28	25.23	70	62.11
2,000-4,999 (4) Total Municipalities Russell	13,646	0.06	488 557	35.79 32.69	279 362	20.43
Total Municipalities-		MET AND	44.12	STORY CHARGOS STANDARD		
Prescott and Russell United County of Prescott and Russell	41,599	0.08	1,451	34.86	965 1,227	23.21
Adjustments-County Rates Grants-Municipalities to County					-,	_,
NET TOTAL PRESCOTT AND RUSSELL	41,599	0.08	1,451	34.86	2,192	52.69
Renfrew		AMP has although an of him he is manufactured and the second	property and with the property of the property	cont and assertation the state of the state		
Towns	10 570	7 [2	(05		9.07	[7] O.E.
Pembroke Renfrew	12,579 7,533	7.53 3.12	635 350	50.52 46.44	897 951	71.35
Arnprior Villages	4,528	4.44	242	53.52	962	212.41
under 2,000 (5) Townships-Rural	4,696	2.11	104	22.22	451	96.06
2,000-4,999 (2) under 2,000 (23) Total Municipalities County of Renfrew	4,440 23,951 57,727	0.05	125 557 2,013	28.06 23.25 34.88	56 144 3,461 60	12.62 6.03 59.96 1.04

Real Property	Grants	Licences	Revenue Utilities and	County			tal
and	and	and	Other Enterprises	Rates	Other		per
Business Tax \$'000	Subsidies	Permits	(Net)	(Net)	Revenue		
φ 000	\$1000	\$ '000	\$1000	\$1000	\$ '000	\$1000	\$
38	10	1		MD 50	(1)	49	19.33
404	268	6			12	690	62.28
1,391	375	19		** ***	68	1,853	53.17
	186	(1)		234	44	464	
	- 33			- 222		- 222	
1,391	528	19		12	110	- 33 2, <del>062</del>	FO 19
	,20			75	116	2,002	59.18
-			-			***************************************	
274	00	2.2					
43	28 · 16	11			12	325 64	44.66 42.18
,5	10	+do			4	04	42.10
32	5	(1)			17	54	26.23
324	72	2			3 8	401	49.11
<u>209</u> 882	<u>57</u> 178	1	40.00			275	50.13
002	110	15			44	1,119	45.66
						-	-
1 -	0						
41	8	1			(1)	50	21.93
28	1+	(1)	W 40	eth coa	(1)	32	28.79
481	1.44	4 5	er 00	~-	8	637	46.67
550	156	5	The Car		8	637 719	42.18
-			CONTRACTOR OF THE PARTY OF THE	-		-	The state of the s
1,432	334	20			52	1,838	44.23
	308	1		447	24	780	
		***		- 443		- 443	
ET 500	- 35	date date				- 35	
1,432	607	21		) <sub>þ</sub>	76	2,140	E1 E1
1,404	001			7-19	10	C,140	51.51
****							
604	72	13	8		31	728	57.86
350	<b>5</b> 9	2	es	***	12	423	56.11
242	23	2	Min from		13	280	61.87
104	20	2		600 EEA	9	135	28.74
3.00	2=						
123	35	2 9	w 40		2	162	36.41
546 1,969	<u>247</u> <u>456</u>	30	8		19 86 2	821	34.26
±,5∪5 	44	(1)		398	3	445	17 - 47

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans)

Renfrew (Continued) Adjustments-County Rates Grants-Municipalities to County Utilities	Assessed Population	Density of Assessed Population per Acre	Total	per Capita	Total \$ 1000	per Capita \$
NET TOTAL RENFREW	57,727	0.05	2,013	34.88	3,521	61.00
		-				
NET TOTAL - OTTAWA VALLEY REGION	375,859	0.11	20,213	53.78	40,290	107.20

#### REGION 13 - OTTAWA VALLEY

	EXPE	INDITURE 1952				
Carleton City	General Government	Protection of to Persons	es Public Norks	Sanitation &	Recreation & Community Services	Conservation of Health
Ottawa Town	1,012	2,969	1,377	1,176	612	1,433
Eastview	58	71	108	00	_	
Villages	)0	1 -	100	29	5	
under 2,000 (2) Townships-Suburban	15	32	36	12		1
Gloucester	22	12	47		(1)	3
Nepean	24	15	77	****	( + )	3
Townships-Rural	^					
Osgoode under 2,000 (7)	9 30	1 23	69 203	(1)	2	4
Total Municipalities	1,170	3,123	1,917	1,217	620	1,448
County of Carleton	51	242	500		~-	
Adjustments-County Rates	We do	71.0		en un		
Grants-Municipalities to County		- 140	- 67			~-
Utilities	en 4-		99 10			
NET TOTAL CARLETON	1,221	3,225	2,350	1,217	620	1,448
		Section 2. Windowskie				Mark Company of the C
Lanark						
Separated Town Smith's Falls	36	66	0)			
Towns	20	00	84	21	20	17
2,000-4,999 (3) Village	54	70	82	27	16	12
Lanark	3	3	2	/ 7 \		
Townships-Rural	J	2	۲.	(1)	1	2
Montague	3	1	14	00 00	(1)	(1)
under 2,000 (12) Total Municipalities	<u>31</u> 127	8	355	(1)	1	
Town Municipations	121	148	537	48	38	36

<sup>(</sup>c) No breakdown of grants for Ottawa available.

# REVENUE 1952

Real Property	Grants	T d =	Revenue			~ ~ ~ ~ ~ ~ ~	
and	and	Licences	Utilities and Other Enterprises	County	Other	Tot	al
Business Tax	Subsidies \$'000	Permits \$'000	(Net)	(Net)			Capita
Ψ 000	\$ 000	\$ 1000	\$ .000	\$ 1000	\$ 1000	\$ 1000	\$
				- 392		-392	
pa 40	- 25				~-	- 25	
	40-40		- 2			- 2	
1,969	475	30	6	6	89	2,575	44.61
			**************************************				
20,076	5,461	241	6	29	822	26,635	70.87
		-					

#### REGION 13 - OTTAWA VALLEY

	~		EXPE	INDITURE 1952				
Public ON Welfare	Education (School	Met O Debt	Wtilities  & Other Enterprises (Net)	© Expenditure out of Revenue	County Cates	000 other	& Amount	Capita
711	5,055	1,275	73	214		383	16,290	81.07
30	200	32			72		605	37.99
1	62	16	***	11	60	6	252	156.25
5 1	109 104	(1)		15	52 41	2	267 267	42.45 65.73
753 105 - 18	71 179 5,780	1,335 68 -8	73	240 3	120 389 - 389	3 8 403 35  - 7(c)	209 578 18,468 1,004 - 389 - 240	54.95 63.88 76.41
840	5,780	1,395	- 19 54	243	Grand Control of Control	431	- 19 18,824	77.89
20	178	74	3	1		1	521	62.47
9	177	17	16	1	76	. 14	561	46.43
	7	1			3	(1)	22	26.86
1 4 34	11 138 511	3 7 102	19	<u></u> 5 7	14 129 222	2 9 16	49 692 1,845	19.26 62.53 52.96

# EXPENDITURE 1952

	General Government	Protection in the protection in the property of & Property	Public Works	Sanitation &	Recreation & Ommunity Services	conservation of Health
Lanark (Continued) County of Lanark	18	50	255	~~		
Adjustments-County Rates Grants-Municipalities to		- 9	- 10			
County NET TOTAL LANARK	145	189	782	48	38	36
Prescott			-			
Towns ,	31	41	44	8	7	6
Vankleek Hill Villages	7	5	15	1	5	1
under 2,000 (2) Townships-Rural	14	14	7			2
2,000-4,999 (3) under 2,000 (4)	18	5 2	112 94			7
Total Municipalities- Prescott	73	67	272	9	3	19
Russell	-					
Town Rockland	6	<u>)                                    </u>	10			(1)
Village Casselman	2	3	5	(1)		(+)
Townships-Rural 2,000-4,999 (4)	26	8	189	(1)	7	Α.
Total Municipalities- Russell	34	15	204	<del>\1</del>	-17	9
Total Municipalities-						
Prescott and Russell United County of	107	82	476	9	10	28
Prescott and Russell Adjustments-County Rates	39	39	502	~~ ~~		28
Grants-Municipalities to County		~ m	- 5			
NET TOTAL PRESCOTT AND RUSSELL	146	121	973	9	10	56
Renfrew Towns						
Pembroke Renfrew	64 25	139 63	94 58	16 19	21 18	21 8
Arnprior Villages	21	32	64	5	11	l
under 2,000 (5) Townships-Rural	15	14	25	1	(1)	1
2,000-4,999 (2) under 2,000 (23)	9 -54 -188	3 13	50 306	(1)	1	2 10
Total Municipalities County of Renfrew	188 26	264 80	597 163	141	57	43

# EXPENDITURE 1952

Public   Welfare	Education (School Levies, Etc.)	Net Debt	Utilities  & Other Charterprises (Net)	Gapital Expenditure out of Revenue	County Sates	000 cther	S Amount	Capita \$
70 - 14 - 90	26  537	9	19	31 38	- 222	6 22	465 - 222 - 33 2,055	58.99
6 2	101 15	27 1	~~	1	39 9	6	310 60	42.53 38.99
2	11	1			8	1	50	24.43
7 4 21	111 66 304	4 1 34		(1)	118 88 262	21 2 31	403 273 1,096	49.36 49.73 44.67
	erendental						empressional descriptions comme education del provincia grand del	
5	18	(1)			8	2	53	23.43
1	13	(1)		~~	6	(1)	31	27.63
17 23	163	10			167	44	639 723	46.83
					Any amount group and	mail-regit value	San Japan	
1+1+	498	1+1+		1	443	77	1,819	43.75
159  - 30	19  	35  		11	- 443	14	846 - 443 - 35	
173	517	79	and described the state of the	12		91	2,187	52.62
16 9 6	194 115 80	21 12 18		12 23	103 63 39	10 20	711 433 277	56.52 57.51 61.24
3	41	3	2	3	18	9	135	28.68
1 7 42 154	53 255 738 12	2 4 60 12	2	2 40	33 136 392	1 10 50 4	155 803 2,514 451	34.88 33.54 43.56

	EX	PENDITURE 1952				
	Government	Trotection to Persons	Public OWorks	Sanitation &	Recreation & Community Service	conservation of Health
Renfrew (continued)						
Adjustments-County Rates		mor mar				60 cm
Grants-Municipalities to County					***	
Utilities NET TOTAL RENFREW	214	344	760	41	<del></del> 57	43
	The same and the same as				-	-0-
NET TOTAL-OTTAWA VALLEY REGION	1,726	3,879	4,865	1,315	725 1	,583

#### REGION 14 - THE HIGHLANDS

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debenture, Bank Overdraft and Temporary Loans) 1952

		Density of	Tax	Levy	De	bt
	Assessed	Assessed		per		per
	Population	Population per Acre	Total \$'000	Capita \$	Total \$'000	Capita \$
Haliburton Townships-Rural Dysart et al (d) under 2,000 (8) Total Municipalities Provisional County of Haliburton	3,082 4,602 7,684	0.01 0.02 0.01	83 122 205	26.92 26.54 26.69	122 146 268 400	39.72 31.83 34.99 52.06
Adjustments-County Rates						
NET TOTAL HALIBURTON	7,684	0.01	205	26.69	668	87.05
					-	
Muskoka Towns						
2,000-4,999 (3)	9,032 372	5.42 0.16	<b>3</b> 63	40.23	1,384	153.27
Bala Villages	314	0.10	23	10.09	~ *	
under 2,000 (3)	771	0.16	42	54.66	76	98.99
Townships under 2,000 (18)	12,052	0.02	379	31.44	264	21.96
Total Municipalities-	22,227	0.04	813	36.60	1,724	77.63
Nipissing City						
North Bay	19,322	17.99	902	46.70	872	45.15
Towns Sturgeon Falls	5,132	5.16	194	37.72	135	26.23
Mattawa under 2,000 (2)	3,186 1,380	5.08 1.24	90 23	28.18 16.86	343 61	107.69 44. <b>5</b> 2

<sup>(</sup>d) Comprises Townships of Dysart, Guilford, Harburn, Dudley, Harcourt, Bruton, Havelock, Eyre and Clyde.

EXP	END	IT	URE
	195	2	

Public O Welfare	Education (School Levies, Etc.)	Met ODebt Charges	Utilities	Gental	County ORates	s'ooo	Tot	Capita Capita
- 25			00 00 00 00		- 392		-392 - 25	
171	750	72	- 2  73	333	60 GG	54 598	- 2 2,546 25,612	44.13
		-						

## REGION 14 - THE HIGHLANDS

			Revenue				
		Licences	Utilities and			Tot	al
and Business Tax	and Subsidies	and	Other Enterprises (Net)			A	per
\$ 1000		\$ '000	\$1000	4 1000	Revenue \$'000	Amount \$1000	\$
Ψ	¥	Ψ	Ψ	Ψ	φ	φ	Ψ
82	51	1	3		13	150	48.81
117	80_	1			4	202	43.94
199	131	2	3		17	352	45.90
es 40	1		la ar	20	2	23	
				- 20		- 20	
199	132	2	3		19	355	46.33
-	-	**********					
360	60	7	5		21	453	50.20
29	6	(1)	em sto	***	2	37	99.77
42	7	(1)			4	53	68.32
374	215	14.			15	608	50.46
805	288	11	5	en ep	42	1,151	51.80
	-		-				
897	116	34	42		72	1,161	60.07
100	58	e	5		20	281	54.79
193 90	21	5 2	7		7	120	37.59
23	10	(1)	10.40		i	34	24.39

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdrafts and Temporary Loans) 1952

		Density	Tax	Levy	Deb	t
Nipissing (continued)	Assessed Population	Assessed Population per Acre	Total \$'000	per Capita	Total \$'000	per Capita
Townships 2,000-4,999 (2) under 2,000 (9)	6,548 7,830	0.14	180 139	27.48	437 105	66.69 13.40
Improvement District Cameron Total Municipalities-	196 43,594	0.02		13.94	1,953	44.80
m						
Parry Sound Towns Parry Sound under 2,000 (3)	5,170 1,700	4.31 0.96	261 34	50.54 20.06	704 17	136.16 9.99
Villages under 2,000 (5)	2,944	1.06	84	28.62	482	163.77
Townships under 2,000 (18) Total Municipalities-	10,972	0.02		<u>25.84</u> <u>31.90</u>	233	21.23
NET TOTAL-HIGHLANDS REGION	94,291	0.05	3,211	34.07	5,381	61.33

#### REGION 14 - THE HIGHLANDS

#### EXPENDITURE 1952 Sanitation & Waste Removal Conservation of Health to Persons and Property General Government Protection Recreation Community Public Works Haliburton Townships-Rural \$1000 \$1000 Dysart et al (d) under 2,000 (8) Total Municipalities Provisional County of 58 102 14 5 Haliburton Adjustments-County Rates 160 NET TOTAL HALIBURTON Muskoka 9 9 83 48 2,000-4,999 (3) Bala Villages 11 under 2,000 (3) Townships under 2,000 (18) Total Municipalities-

REVENUE 1952

			Revenue				
Real Property			Utilities and	County		Tot	
and Business Tax	and Subsidies		Other Enterprises (Net)		Other Revenue	Amount	per
\$ '000		\$'000	\$1000		\$1000	\$ 1000	\$
Ψ	φ σσσ	φ σσσ	φουσ	φ	ψ	φυσο	Ψ
178	46	4	49 60		9	237	36.23
138	137	2	404 600		3	280	35.78
3 1,522	391	(1)	400 Miles		(1)	6	30.07
1,522	391	47	47		. 112	2,119	48.60
**************************************							-
261	24	5	40 TO		18	308	59.61
34	24 6	5 1			1	42	
84	11	1	2	400 010	7	105	35.77
070	2.00	,			7.7	1.02	1.2 00
273 652	193	11	- 2		$-\frac{11}{37}$	936	43.88 45.08
0)2	234	11	4		21	930	47.00
					= ===	-	
3,178	1,045	71	57		210	4.561	48.39
3,-10	-,07)	. 1					
Printed Advisor Advantagement				-			

#### REGION 14 - THE HIGHLANDS

# EXPENDITURE 1952

Welfare	Education (School Levies, Etc.)	Met of Charges	Utilities and Other Enterprises	Capital Capital Capital Capenditure Cout of Revenue	County Cates	ooi other	oT	Capita
8 <u>4</u> 12	36 38 74	2	and and	(1) 9 9	8 12 20	15 5 20	156 201 357	50.78 43.60 46.48
15 27	74	2	40 40 40 40 40 40	9	- 20	24	27 - 20 364	47.49
18 (1)	140 7	43 (1)		13		10 (1)	454 34	50.29 90.06
1	15	3		2	£ =	1	48	61.87
<u>30</u> 49	140 302	16		19		5	1,138	49.93 51.16

# EXPENDITURE 1952

Nipissing	General Covernment	Protection to Persons and Property	Public Works	Sanitation &	Recreation & Community Service	Conservation of Health
City						
North Bay Town	45	210	115	73	37	46
Sturgeon Falls	24	35	42	16	4	27
Mattawa	15	10	15	2	1	5
under 2,000 (2) Townships	3	3	16	(1)	(1)	5 3
2,000-4,999 (2)	24	17	42	1	2	5
under 2,000 (9)	22	3	147	(1)	3 (1)	17
Improvement District Cameron	3	/2 \	1			/2.\
Total Municipalities-	134	278	381	92	45	(1)
					77	100
Downer Cound					and the same of th	
Parry Sound Towns						
Parry Sound	16	31	36 8	13 (1)	15 2	9
under 2,000 (3) Villages-	3	8	8	(1)	2	9 2
under 2,000 (5)	14	9	18	1	7	3
Townships					'	,
under 2,000 (18) Total Municipalities-	<u>46</u> 79	<u>8</u> 56	260 322	<u>5</u> 	5 29	<u>15</u> 29
Total Mullelparities-	19	20	322	19	29	29
NET TOTAL-HIGHLANDS						
REGION	364	441	1,278	126	111	165

## REGION 15 - CLAY BELT

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdrafts and Temporary Loans) 1952

			Density	Tax	Levy	Deb	t
Cochrane Towns		Assessed Population	Assessed Population per Acre	Total \$'000	per Capita \$	Total \$'000	per Capita \$
Timmins Kapuskasing 2,000-4,999 under 2,000 Townships	(2)	25,910 5,029 5,534 3,153	9.69 4.46 4.02 1.59	1,247 471 266 313	48.12 93.65 48.03 99.14	1,116 1,116 911 300	43.07 231.95 164.58 95.21
Tisdale 2,000-4,999	(2)	8,518 7,293	0.40	411 180	48.22 24.70	482 167	56.55 22.94

# EXPENDITURE 1952

Public Welfare	Education (School Levies, Etc.)	whet Debt	Utilities and Other Enterprises	Capital Expenditure Out of Revenue	County Ool Rates	Other	Tot	capita
85	396	<b>5</b> 2		con time		1111	1,103	57.06
35 10 1	77 34 11	11 2 (1)	6	1 <sub>4</sub>		5 7 (1)	276 111 37	53.69 34.79 26.78
22 26	102 45	2		1	m m	11 9	230 271	35.17 34.56
<u>(1)</u> 179	666	69		5		76	6 2,034	29.71 46.62
					Age age of the same	Service Service Country of the Service		
15 1	133 15	35 2	e- e-	w m		5	308 42	59·57 24·47
3	37	24	n= 00	1		9	106	35.91
30 49	105	45	( <u>1</u> )	1 2		5 20	940	44.14
304	1,332	178	6	35		136	4,476	47.45

## REGION 15 - CLAY BELT

Real Property and Business Tax	Grants and Subsidies	Licences and Permits	Utilities and Other Enterprises (Net)	County Rates (Net) \$'000	Other Revenue	Amount \$'000	per
1,234 470 266 313	316 34 42 38	21 4 8 1	  		58 13 11 5	1,629 521 327 357	62.86 103.50 59.14 113.21
411 179	272 160	4 2	29		35 20	722 390	84.70 53.46

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		DensityDebt				
Cochrane (continued)	Assessed Population	Assessed Population per Acre	Total \$ '000	per Capita \$	Total \$'000	per Capita
Townships under 2,000 (6) Total Municipalities	6,891 62,328	0.05	177 3,065		246 4,388	35.75
Timiskaming						
Towns 2,000-4,999 (3) under 2,000 (3) Village	8,611 2,269	3.50 2.21	367 59	42.59 25.81	681 330	79.10 145.31
Thornloe Townships	173	0.12	3	16.81		
Teck under 2,000 (17) (e) Improvement Districts, under 2,000 (3) Total Municipalities	18,459 11,935	0.89	759 299	41.12 25.06	697 410	37·77 34·39
	2,509 43,956	0.06	1,574	34.57 35.79	233 2,351	92.88 53.50
TOTAL-CLAY BELT REGION	106,284	0.15	4,639	43.63	6,739	63.42

#### REGION 15 - CLAY BELT

#### EXPENDITURE Sanitation & Waste Removal હ Conservation of Health to Persons Recreation Government Protection Property Community Service General Public Works \$1000 \$1000 \$1000 \$1000 \$1000 \$1000 Cochrane Timmins 113 262 115 114 57 59 Kapuskasing 37 36 78 69 26 1 2,000-4,999 (2) 42 44 13 5 under 2,000 (3) 19 63 18 10 Townships Tisdale 61 84 107 123 113 29 34 26 2,000-4,999 (3) under 2,000 (6) 33 26 48 34 17 Total Municipalities 634

<sup>(</sup>e) includes Armstrong 1951 figures; 1952 figures not available by the municipality.

# REVENUE 1952

			Revenue				
Real Property	Grants		Utilities and	County		To	tal
and	and		Other Enterprises				per
Business Tax	Subsidies		(Net)		Revenue	Amount	
\$1000	\$ '000	\$1000	\$'000	\$1000	\$1000	\$1000	\$
177	7 11.11	3			10	334	48.47
177 3,050	144	43	29		152	4,280	68.65
	,					.,	
	-						Office and the last of the las
-(-							
367	59	5 1	(1)		64	496 80	57.61
59	14	Τ	(1)	mg 450	6	80	35.48
3	1	(1)			(1)	14	20.31
3	***	(-)			(+)	**	20.31
759	326	16		Mg 194	32	1,133	61.38
297	238	4	₩ M		34	573	48.04
0=		(-)			_	-1.0	-0 (-
1,572	153 791	(1)			8	248	98.69
1,014	191	20	Τ.		144	2,534	57.65
		-			-		
4,622	1,797	69	30		296	6,814	64.10
.,	7,77		3-		-,-	, , , , , ,	
And the second s			American Company of the Company of t				

### REGION 15 - CLAY BELT

# $\frac{\texttt{EXPENDITURE}}{1952}$

Chublic Welfare	Statestion (School	Scharges	Outilities and other outerprises	Capital Expenditure out of Revenue	County	cooo_other	- Amount	Capita
127 4 13 2	635 243 110 182	81 20 15 (1)	7 21	25 39 10 12		9 3 6 2	1,597 534 322 343	61.63 106.26 58.28 108.72
22 20 14 202	211 69 84 1,534	10 18 6 150	26 7 61	91 (1) 8 185		39 29 6 94	740 370 321 4,227	86.83 50.72 46.61 67.82

	EX	PENDITURE 1952			
	Government	Protection of to Persons old Property	Public OWorks	Sanitation &	Recreation & Community Service
Timiskaming Towns					
2,000-4,999 (3) under 2,000 (3)	41 11	75 9	86 14	56 4	23 13 1 2
Village Thornloe	1	(1)	1	-T	C
Townships Teck	72	177	157	58	24 50 2 15
under 2,000 (17) Improvement Districts	51	28	270	5	
under 2,000 (3) Total Municipalities	26 202	304	<u>46</u> 574	8	8 <u>3</u> 58 83
NET TOTAL-CLAY BELT REGION	549	856	1,208	342	178 220
			-		

### REGION 16 - NICKEL RANGE

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		DensityTax LevyDebt					
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total	per Capita	
Manitoulin Towns			,	,	T	T	
under 2,000 (2) Townships	2,217	3.15	79	35.67	254	114.66	
under 2,000 (11) Total Municipalities	5,218 7,435	0.01	107	20.59	49	9.46	
		-			Windowsky many first state of		
Sudbury City							
Sudbury Towns	46,059	26.62	2,522	54.75	6,251	135.72	
2,000-4,999 (3) under 2,000 (5) Townships	8,484 4,563	2.22	479 . 158	56.48 34.55	721 450	84.89 98.68	
McKim Neelon & Garson Chapleau under 2,000 (15)	12,700 7,195 4,127 11,515	0.83 0.22 2.47 0.03	319 114 119 222	25.15 15.87 28.84 19.29	1,021 418 425 314	80.40 58.10 103.04 27.23	
Improvement District Renabie Total Municipalities	352	0.04	8	22.29	3	11.36	
NET TOTAL-NICKEL RANGE	94,995		3,941	41.48	9,603	101.09	
REGION	102,430	0.12	4,127	40.30	9,906	96.73	

# EXPENDITURE 1952

Public   Welfare	G (School School	Net O Debt O Charges	Utilities and other Enterprises	Capital Capital Capital Capital Capital Revenue	County	\$ October	Amount \$	capita
17 1	150 23	30 1	das cas cas co	5 1	non for min for	8 8	504 75	58.57 33.09
	1	(1)		aa 100			3	16.36
88 36	435 128	45 19	6	13	600 - 600 Mar - 600	11 14	1,123 581	60.82 48.69
146	<u>57</u> 794	17	2 8	49	min dip retarealisaterprise day 40	<u>5</u> 46	240 2,526	95.53 57.46
348	2,328	262	69	253		140	6,753	63.54
with the the transfer of the t	-			-				

### REGION 16 - NICKEL RANGE

	_		Revenue				
Real Property	Grants			County		Tota	al
and	and	and	Other Enterprises	Rates		A	per
Business Tax \$'000	Subsidies \$'000	Permits \$'000	(Net)	\$1000	Revenue \$'000		\$
\$ .000	φ 1000	φ σσσ	φουσ	φουσ	φοσο	φ	Ψ
						- 0	
78	16	1	ag qu		3	98	44.30
103	62	2	AND value		2	169	32.43
181	78	3	the sec	~ -	5	267	35.97
							-
2,447	508	53			253	3,261	70.80
479	41	3	, 4		19	546	64.31
157	26	3 1			14	198	43.35
011	228	6			31	539	42.48
274 114	187	6			24	331	45.96
118	15	1			9	143	34.60
220	171	3			9	403	34.96
7	(1)	~~	ec es		1	8	23.30
3,816	1,176	73	4		360	5,429	57.14
2 007	7 054	76	=7-		365	5,5,6	55.1.1
3,771	-,-/-	-		-			

#### REGION 16 - NICKEL RANGE

	E	XPENDITURE 1952				
	Government	Protection of to Persons & Property	Public O Works	Sanitation &	Recreation & Community Service	Conservation of Health
Manitoulin Towns						
under 2,000 (2)	8	8	19	1	6	1
Townships under 2,000 (11)	15	6	66	(1)	(1)	2
Total Municipalities	23	14	66 85	1	6	3
	Water Committee Committee				-	The state of the s
Sudbury City						
Sudbury	261	480	314	158	101	54
Towns 2,000-4,999 (3) under 2,000 (5)	30 15	69 27	103 18	18 10	6 4	1 <sub>4</sub> 2
Townships McKim Neelon & Garson	41 32	33 22	125 108	38 14	2	4 5
Chapleau under 2,000 (15)	19 42	16	28 202	(1)	2 3 2 3	5 5 11
Improvement District Renable Total Municipalities	1-141	(1)	(1) 898	240	121	85
NET TOTAL-NICKEL RANGE REGION	464	663	983	241	127	88

### REGION 17 - SAULT

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Tax	Levy	Debt	
Assessed Population	Assessed Population per Acre	Total	per Capita	Total \$'000	per Capita
34,086	8.57	2,355	69.08	3,323	97.49
2,443 2,014	2.99	69 66	28.16 32.94	1.04 75	42.62 37.46
172	0.74	3	19.95		
5,384 3,975 8,645 56,719 56,719	0.17 0.20 0.02 0.11 0.11	138 81 226 2,938 2,938	25.56 20.38 26.14 51.80 51.80	177 141 36 3,856 3,856	32.93 35.50 4.18 68.00 68.00
	Population  34,086  2,443 2,014  172  5,384 3,975 8,645	Of Assessed Population Per Acre  34,086 8.57 2,443 2.99 2,014 0.91 172 0.74 5,384 0.17 3,975 0.20 8,645 0.02 56,719 0.11	Of Assessed Population Per Acre \$'000  34,086 8.57 2,355  2,443 2.99 69 2,014 0.91 66  172 0.74 3  5,384 0.17 138 3,975 0.20 (1) 81 8,645 0.02 (26) 56,719 0.11 2,938	Of Assessed Population Per Acre Population Per Acre \$ 1000 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Assessed Population Per Acre Population Total Capita Total \$\frac{1}{5}\cdot 0.000}  34,086 8.57 2,355 69.08 3,323  2,443 2.99 69 28.16 1.04 2,014 0.91 66 32.94 75  172 0.74 3 19.95  5,384 0.17 138 25.56 177 3,975 0.20 (1) 81 20.38 141 8,645 0.02 (1) 81 20.38 141 8,645 0.02 (1) 226 26.14 36  56,719 0.11 2,938 51.80 3,856

<sup>(</sup> $^{\uparrow}$ ) Total average of Michipicoten Township included-assessed average not available.

## REGION 16 - NICKEL RANGE

# EXPENDITURE 1952

Chublic Welfare	Education (School Levies, Etc.)	Met Debt Charges	Outilities of and Other Outerprises	Capital Expenditure Out of Revenue	County ORates	OOO ther	Amount	Capita
4	31	1	1			19	99	44.53
6	44 75	3 4	1	<u>25</u> 25		1 20	168	32.24 35.90
Substitution on the substitution of the substi	- Control of the Cont			-				Annual Control of Cont
226	1,092	391	~ ~			14	3,081	66.88
8 18	249 81	37 8	***	5 3	100 FB	4 3	<b>533</b> 189	62.77 41.45
31 25	157 97	61 1	12	2 2		26 6	520 327	40.96 45.44
25 3 38	34 94	1 1 (1)	21	1 3		9 30	139 427	33.16 37.07
<u>2</u> 351	6 1,810	499	33	16		82	5,225	26.21 54.97
361	1,885	503	34	41		102	5,492	53.59

### REGION 17 - SAULT

Real Property and Business Tax \$ 1000	Grants and Subsidies \$ 1000	Licences and Permits	Other Enterprises	County Rates (Net) \$'000	Other Revenue	Amount \$ 1000	tal per Capita
2,319	167	24	ee 40		142	2,652	77.80
69 66	10 8	2 1	<u>+</u>	N 40	33 4	118 79	48.20 39.04
3	(1)	(1)			1	14	23.06
131 81 204 2,873 2,873	30 19 167 401 401	1 1 4 33 33	14 14		1 3 11 195 195	163 104 386 3,506 3,506	30.22 26.22 44.60 61.79 61.79

### REGION 17 - SAULT

# EXPENDITURE 1952

	Government	Protection to Persons	Public Works	- Sanitation &	Recreation & Community	Conservation
Algoma City						
Sault Ste. Marie	173	423	197	96	123	88
Towns						
Blind River	14	10	18	1	(1)	3 2
under 2,000 (3)	10	12	16	(1)	2	2
Villages						
Hilton Beach	1	(1)	1	(1)	(1)	(1)
Townships						
Korah	16	1	38	1	1	2
Tarentorus	. 8	1	22	(1)	(1)	1
under 2,000 (14)	40	18	128	7	1	6
Total Municipalities	262	465	420	105	127	102
NET TOTAL-SAULT	262	465	420	105	127	102
	germagijale in djele o ostoren i sene a jerom j djelengijale indiction produce o produce differentija	emperatura de la compansa de la comp				

### REGION 18 - LAKEHEAD

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density	Tax	Levy	Debt	
Kenora Towns	Assessed Population	of Assessed Population per Acre	Total \$'000	per Capita	Total \$'000	per Capita
Kenora 2,000-4,999 (2) Keewatin Townships	9,108 5,081 1,644	2.56 6.03 1.03	598 296 73	65.69 58.21 44.37	962 1,154 24	105.64 227.11 14.68
under 2,000 (4) Improvement District	3,636	0.04	99	27.16	14	3.85
Sioux Narrows Total Municipalities	208 19,677	0.08	19	90.26 55.12	26 2,180	125.00 110.80
						***************************************
Rainy River Towns						
Fort Frances Rainy River Townships	8,146 1,357	2.08 2.28	522 54	64.07 39.87	1,188	145.88 86.62
under 2,000 (11) Improvement Districts	5,969	0.02	163	27.29	70	11.73
Atikokan Kingsford Total Municipalities	3,056 135 18,663	0.10 0.01 0.04	88 1 828	28.92 10.81 12.26	674 1 2,051	220.55 6.30 109.89

### REGION 17 - SAULT

# EXPENDITURE 1952

Public ON Welfare	Education (School Levies, Etc.)	Wet   Obst   Charges	w Utilities and Other O Enterprises	Capital Capital Capital Capital Revenue	County County	\$ october	Amount:	Capita
143	953	91	17	272		21	2,597	76.18
13 9	21 27	5		29 4		5 5	119 87	48.91 43.25
(1)	2					(1)	4	23.70
14 11 17 207	71 42 67 1,183	1 3 1 101	2	50 355		8 (1) 44 83	153 90 379 3,429	28.49 22.67 43.81 60.46
207	1,183	101	19	355		83	3,429	60.46

#### REGION 18 - LAKEHEAD

Real Property	Grants	Licences	-Revenue Utilities and	County		Tot	tal
and Business Tax \$ 1000	and		Other Enterprises (Net) \$'000		Other Revenue \$'000		per Capita
598 294 73	68 49 7	10 4 1	26 39	60 60 60 60 60 60	43 47 2	745 433 83	81.80 85.17 50.44
98	35	1	wa esa		7	141	38.80
19 1,082	<u>(1)</u> 159	(1)	65		100	20	96.34 72.26
		-				grapping the second seco	
521 54	67 12	9 (1)	55 2		22 5	674 73	82.78 53.84
144	102	2	w es		8	256	42.91
88 1 808	76 1 258	(1) 12	57		21 1 57	186 3 1,192	60.85 20.49 63.88
			Management Committee		-		anguana anguang da mandadar angun angun da

# ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density of	xaT	Levy	LevyDebt		
	Assessed Population	Assessed Population per Acre	Total	per Capita	Total	per Capita	
Thunder Bay Cities		bet Were	<b>ф</b> 1000	Ф	\$ .000	\$	
Fort William Port Arthur	36,888 33,698	4.59 5.69	2,670 2,141	72.38 64.54	8,143 7,155	220.76	
Towns Geraldton	3,017	3.27	128	42.49	122	40.60	
Townships 2,000-4,999 (2)	6,357	0.03	233	36.58	386	60.71	
under 2,000 (7) Improvement Districts	7,210	0.04	251	34.78	465	64.43	
Marathon under 2,000 (5) Total Municipalities	2,000 5,445 94,615	1.00 0.06 0.18	228 276 5.927	113.85 50.73 62.64	116	58.01 272.46	
100at Manietpatities	94,019	0.10	7,941	02.04	17,871	188.88	
TOTAL-LAKEHEAD REGION	132,955	0.12	7,840	58.97	22,102	166.23	
	CONTRACTOR OF THE PARTY OF THE						

### REGION 18 - LAKEHEAD

## EXPENDITURE

Vanaua	Government	Protection to Persons & Property	Public Works	Sanitation & Waste Removal	Recreation & Community Service	Conservation of Health
Kenora Towns	\$1000	\$1000	\$1000	\$'000	\$ '000	\$1000
Kenora 2,000-4,999 (2) Keewatin Townships-	43 38 13	107 44 8	97 60 20	39 27 3	39 24 4	32 23 2
under 2,000 (4)	14	l,	45	(1)	1	4
Improvement District Sioux Narrows Total Municipalities	3	160	(1)	<u>(1)</u> 69	68	<u>1</u> 62
Rainy River Towns	Application of the control of the co	Account of the control of the contro				
Fort Frances Rainy River Townships-	42 7	70 7	65 15	18 3	38 2	16 2
under 2,000 (11) Improvement Districts	28	4	134	(1)	2	3
Atikokan Kingsford Total Municipalities	9 (1) 86	14 (1) 95	57 2 273	5  26	(1) 45	(1) 22
Thunder Bay Cities						
Fort William	181	485	125	135	128	243

#### REVENUE 1952

			-Revenue				
Real Property			Utilities and	County		To	tal
and	and	and	Other Enterprises				per
Business Tax			(Net)	(Net)	Revenue		
\$ 1000	\$1000	\$1000	\$1000	\$ 1000	\$1000	\$ '000	\$
2,590	195	20	61		129	2,995	81.19
2,126	156	32			305	2,619	77.71
128	39	3			10	180	59.80
							50 55
232	79	1		~-	11	323	50.75 48.19
247	70	3			27	347	40.19
228	39	(1)			6	273	136.54
276	40	3			17	336	61.67
5,827	618	62	61			7,073	74.75
		and the same of the same					
7,717	1,035	90	183		662	9,687	72.87
			-				

#### REGION 18 - LAKEHEAD

# EXPENDITURE 1952

Public Welfare	Education (School Levies,Etc.)	Net Clebt Charges	Utilities and other	G Capital Expenditure out of Revenue	County Rates	o Other		Capita les
54 LO 1	240 131 27	18 45 1		2 10 3		22 1.6 2	693 428 54	76.06 8, 50.88
5	41	2		14		18	135	37.22
<u>(1)</u> 70	10 449	(1)		19	00 to	<u>3</u>	1,357	81.26 68.96
					V market by the second	-		
73 9	246 18	30 7		2		16 (1)	616 70	75.64 51.35
20	54	2		8	600 660	L	259	43.33
12 (1) 114	55  373	45	60 FE	10		1 21	163 2 1,10	53.43 17.41 59.48
102	937	572	••		40* 60	35	2,943	79.79

# EXPENDITURE 1952

	General Government	Protection to Persons	& Public O Works	Sanitation & O Waste Removal	Recreation & O Community O Bervice	Conservation
Thunder Bay (continued)		\				
Port Arthur	257	450	179	100	90	136
Town Geraldton	13	23	32	11	3	5
Townships-	13	23	34	11	3	2
2,000-4,999 (2)	31	3	120	4	1	7
under 2,000 (7)	42	23	107	6	4	5
Improvement Districts						
Marathon	10	23	23	9	5	3
under 2,000 (5)	21	32	46	9		4
Total Municipalities	555	1,039	632	274	236	403
					at the terroring of the control of t	
TOTAL-LAKEHEAD REGION	752	1,294	1,127	369	349	487
		After and anticoders of the second	Al-additional			

#### REGION 19 - JAMES BAY

ASSESSED POPULATION, DENSITY OF ASSESSED POPULATION, TAX LEVY, DEBT (Debentures, Bank Overdraft and Temporary Loans) 1952

		Density	'I'ax	Levy	Deb	t
		of				
	Assessed	Assessed		per		per
	Population	Population	Total	Capita	Total	Capita
	- E	per Acre	\$1000	\$	\$1000	\$
Kenora-Patricia Portion		F-m 11	Ψ	Ψ	Ψ	Ψ
Improvement District						
Balmertown	914	0.02	10	10.98	281	307.63
						<del>9 1 9</del>
Total Municipalities	914.	0.02	10	10.98	281	307.63
	Address of the Park of the Par	-				
TOTAL-JAMES BAY REGION	914	0.02	10	10.98	281	307.63

# EXPENDITURE 1952

Public Welfare	Education (School Sevies, Etc.)	es Net	the Utilities of and Other Enterprises	Capital	County Sates	Other	Tota	capita
101	939	427		58		33	2,770	82.20
6	72	3				10	178	58.84
10 11	121 115	7 8		1 10		11 21	316 352	49.78 48.78
2 232	63 132 2,379	2 1,019	11	132 10 211	40 40 40 40	67	268 341 7,168	133.90 62.70 75.76
416	3,201	1,130	11	240		259	9,635	72.47

### REGION 19 - JAMES BAY

72 2 22			Revenue			Tot	91
Real Property and Business Tax	Grants and Subsidies \$'000	Licences and Permits \$'000	Utilities and Other Enterprises (Net) \$1000	County Rates (Net) \$'000	Other Revenue	Amount \$ 1000	per Capita
10	41	(1)			1	52	56.65
10	41	(1)	***		1	52	56.65
10	41	(1)	40.00		1	52	56.65
Management of the Control of the Con							

#### REGION 19 - JAMES BAY

## EXPENDITURE

	d General	#Protection of to Persons	Mpublic OWorks	Sanitation &	ARecreation & Community Service
Kenora-Patricia Portion Improvement District Balmertown	6			~-	(1)
Total Municipalities	6				<del></del> (1)
TOTAL-JAMES BAY		Managerinagen agency			
REGION	6				(1)

#### REGION 10 - KAWARTHA (continued from page 52)

# EXPENDITURE 1952

	G Government	Protection to Persons	Public O Works	Sanitation &	Recreation & Community Service	Conservation of Health
Victoria						
Town Lindsay	36	72	29	16	24	11
Villages (T)						
under 2,000 (5) Townships-Rural	12	20	17	3	2	1
2,000-4,999 (2)	8	6	65		1	1
under 2,000 (9)	<u>30</u>	11	156	2	3 30	3
Total Municipalities County of Victoria		109	267	21	30	16
Adjustments-County Rates	78	38	264	***		
Grants-Municipalities County		- 5				
NET TOTAL VICTORIA	164	142	531	21	30	16
				-	the spin region and	
NET TOTAL-KAWARTHA REGION	1,091	1,611	3,666	340	390 11	292
Footnotes:					-	

(1) Less than \$500.00

(a) Information not available by municipalities.

(b) Grant from Owen Sound, not classified (Region 9).
(c) No breakdown of grants for Ottawa available (Region 13).

(d) Comprises Townships of Dysart, Guilford, Harburn, Dudley, Harcourt, Bruton, Havelock, Eyre and Clyde (Region 14).

(e) Includes Armstrong 1951 figures; 1952 figures not available by the municipality. (Region 15).

(f) Total average of Michipicotin Township included-assessed average not available. (Region 17).

### REGION 19 - JAMES BAY

# EXPENDITURE 1952

Public OWelfare	estancation (School	selvet OCharges	Outilities and other Outerprises	Capital Expenditure Cout of Revenue	county Ogates	oootoper ottper	tunomy s	per per capita
2	44			1		(1)	53	58.00
2	7+7+		STAGE STRAINING STRAINS	1		(1)	53	58.00
Printed and the last of the la				-			Anneste and the second	
2	44			1		(1)	53	58.00

## REGION 10 - KAWARTHA (continued from page 53)

# EXPENDITURE 1952

Public OWelfare	Education (School Levies, Etc.)	O Debt	Utilities Ond Other Enterprises	Gapital	out Reve Coun	0000 \$ 000	Amount \$	Gapita lasto
1,	150	27			68	6	443	45.46
1.	31	3			24	3	117	33.67
14 5 14 92 -5	85 130 396 10	4 4 38 11 		20 3 23 	73 103 268  -268	3 10 22 22	270 460 1,290 515 -268 - 10	56.11 55.42 49.00
101	406	49		23		44	1,527	58.01
738	4,173	819	270	288	9	388	14,075	59.43



#### THE METROPOLITAN REGION

#### Introduction

The Metropolitan Region is made up of York, Peel and Halton Counties, with a land area of 1,714 square miles. It is the most densely populated Region in the Province, having an estimated population density of 809.2 per square mile in 1953.

The earliest white settlement in the region was a mission established by the Sulpician order at the Indian village of Tarantou. This was followed, sometime between 1720 and 1730, by a small trading post near the mouth of the Humber River. The post grew in importance until, in 1750, it was replaced by a fort, Fort Rouille, which was built three miles to the east, on a point of land overlooking the entrance to Toronto Bay. This fort, which had a garrison of one officer, two sergeants, five soldiers and a storekeeper, was burned in 1759 to prevent its capture by the English.

In 1783 a strip of land bordering the old fur-trading trail between Lake Huron and Lake Ontario was purchased from the Indians by the Governor, Lord Dorchester, who intended to re-open the route from the northwest which by-passed Michilimachinac, Detroit and Niagara, since the Treaty of Paris had awarded them to the Americans. As part of Dorchester's plan a town plot was surveyed at Toronto but nothing more was done about settling the district until ten years later.

In 1793 Governor Simcoe, disregarding the Dorchester plan, built a fort near the ruins of Fort Rouille and laid out a new town, forty acres in extent, on a level tract where the Don River empties into the Bay. Whereas the Dorchester scheme had contemplated a trading post, this new town, named York, was planned as the capital of Upper Canada. Here Governor Simcoe set up his government in part of the tent which he had bought at the sale of Captain Cook's effects before leaving England. The rest of the tent was occupied by the Simcoe household during the winter of 1793-4.

The new capital grew slowly. In 1797 it contained twelve houses, and a census taken in 1805 showed a total of only 474 inhabitants. During the early years of its existence York was cordially detested by the United Empire Loyalist settlements in the colony, as the oligarchy controlling the little capital constantly schemed to extend its authority. However, by 1834, the town had outgrown its early boundaries and some of the characteristics which had rendered it obnoxious to the rest of the colony. In that year, with a population of 9,254, it was incorporated as a city under the name of Toronto.

The city's first mayor, W.L. Mackenzie, took an active part in Canadian politics until the collapse of the rebellion, which he led, in 1837. Although the rebellion was a fiasco, it did attract the attention of the British government to the unhealthy political situation in Canada and thus brought about much-needed reforms.

When the capital was moved to Kingston, after the Act of Union in 1840, Toronto suffered a depression which lasted until the return of the Government nine years later. Shortly afterward, with the building of the Ontario, Simcoe and Huron Railroad in 1851 and the signing of the Reciprocity Treaty with the United States three years later, the prosperity of the city was assured.

#### Metropolitan Area

"An Act to Provide for the Federation of the Municipalities in the Toronto Metropolitan Area for Certain Financial and other Purposes" was passed by the Ontario Legislature in 1953. Unification of common services in the area came into effect at the beginning of this year.

The Toronto Metropolitan Area thus created is composed of 13 municipalities: Toronto, East York, Etobicoke, Forest Hill, Leaside, Long Branch, Mimico, New Toronto, North York, Scarborough, Swansea, Weston and York. These are the sections of York County which have been most affected by a 24 per cent. increase in the population between 1941 and 1951. During this period, while the population of

the city proper increased 1 per cent., the population of the surounding municipalities now forming part of the Metropolitan area increased 82 per cent. These areas had become structurally part of the city, but had their own elected councils, their own schools and systems of local services. Housing development and provision of transportation, water, sanitation and school facilities were hampered by the lack of a central authority.

The Council set up under the Act consists of 24 members: the mayor, two senior controllers and the senior alderman from each of the nine wards of Toronto, and the mayor or reeve of each of the twelve outlying municipalities. The first chairman, F.G. Gardiner, was appointed by the Province. Subsequent chairmen are to be selected by the Council. A Metropolitan School Board of 22 members parallels the Metropolitan Council.

Although the local governments will retain their indentity and continue to have a vital part in the provision of public services in the area, the metropolitan government will assume about a dozen functions which have outgrown local boundaries. It will be responsible for assessments, water supply, sewage, drainage, arterial roads, certain welfare services, public transportation, planning, financing and constructing new schools, payment of maintainance assistance grants to local school boards, and raising capital funds for its own requirements and those of the local municipalities, the Metropolitan School Board and the Toronto Transit Commission. It will share with the local governments broad powers with respect to housing, redevelopment, parks and recreation areas. Taxation revenue will be obtained from each municipality according to its proportionate share of rateable property.

#### Population

The estimated population of the Metropolitan Region was 1,387,000 in 1953, about 28 per cent. of the population of the Province the largest county, York, accounted for 91.5 per cent. of the total.

The rate of population growth in the Metropolitan Region has been some what higher than that for the Province as a whole. During the period 1941-51 the population of the Metropolitan Region increased 26.2 per cent., compared to an increase of 21.4 per cent. for Ontario. This increase has been due only in part to natural increase. A study of the age groups in the census reveals that the population has been substantially increased by immigration from other parts of the Province, Canada, and other countries. In the 35-44 age group, for example there were 196,000 people in 1951, but there were only 171,000 recorded in 1941 in the 25-34 age group. The migration of adults to the Region also meant an increase in the children entering the Region. There were eighty thousand in the 15-19 age group in 1951, but in 1941 only seventy thousand were recorded in the 5-9 group, for example.

The influx of people into the Metropolitan Region is reflected in the high proportion of the labour force to the total population. In Toronto 50.1 per cent. of the population is included in the labour force, the highest percentage among all the major Ontario centres.

The most important characteristic of the population in the Region is the concentration of urban population. Approximately 93 per cent. of the population was classed as urban in the 1951 census. Lower birth rates, a phenomenon typical of urban communities, is characteristic of the Metropolitan Region. The Region has the lowest birth rate of any in the Province, only 23.0 per thousand population in 1951. The average for the Province during the same period was 25.0

#### Commerce & Finance

Toronto is the commercial metropolis of Ontario and one of the two major financial centres of Canada. The wholesale trading orbit of the city encompasses the southern part of the Province. The importance and extent of this wholesale market is not generally recognized. The table below although computed from 1941 census data, shows clearly that the major proportion of the sales of various types of wholesale establishments in Ontario is made by Toronto firms. The pattern of sales to be revealed in the 1951 census is not expected to differ much from this, although sales will be substantially higher.

#### WHOLESALE TRADE

- 1941 -

		SHMENTS	TOTAL	Toronto Sales As a % of	
	Toronto	Ontario	Toronto	Ontario	Ontario
Wholesales proper Manufacturers sales branches Agents and brokers Other operations	1,846 301 488 152	3,539 548 654 1,503	532.6 356.9 171.2 75.3	817.8 478.6 207.6 240.7	65 75 82 <u>31</u>
TOTAL TRADE	2,787	6,244	1,136.0	1,744.7	65

Source of Original Data: Census of Canada, 1941.

In the realm of finance the influence of the Toronto money market extends throughout the nation and beyond its borders. Five of the eleven chartered banks have their head or chief offices in Toronto, and the chief offices of numerous insurance, trust, and loan companies are established in the city. Twenty of some fifty insurance companies operating in Canada have head offices in Toronto. Markets for both stocks and bonds have widened and developed steadily, with the result that Toronto now has more investment dealers than any other city in Canada. The three largest investment firms in Canada are located in Toronto--A.E. Ames, Wood Gundy, and Dominion Securities. Finance, insurance, and real estate companies employed 5.8 per cent. of the total labour force in the Metropolitan Region, contrasted with other Ontario centres which employ between one and two per cent.

The volume of cheques traded in the clearing house is an indicator of the financial provess of a city. In recent years the total value of cheques cashed in the Toronto clearing house has exceeded that of any other in the country, and accounts for more than one-quarter of the Canadian total.

The Toronto Stock Exchange, the pulse of the financial community, was established in 1852. Opened in a period when British capital was difficult to obtain, the exchange made possible the development of a Canadian money market. Since that time its volume of trading has increased until it has become one of the foremost in the world, and the largest with respect to mining shares. The number of stocks listed on the exchange, only 36 in 1861, reached a total of 1,040 with a listed value in excess of twenty billion dollars at the end of 1953. The Exchange reports that for the second time in its history, Toronto Stock Exchange figures eclipsed all other exchanges on the North American continent in share activity during 1953.

Another indicator of the financial importance of a city is the size and distribution of personal income among the inhabitants. According to taxation statistics for 1950, issued by the Department of National Revenue, approximately 9,800 returns reporting more than \$10,000 taxable income were received in the Toronto district. This represents almost twenty per cent. of the people reporting such incomes in Canada.

# CHEQUES CASHED THROUGH CLEARING HOUSE CENTRES (Million Dollars)

	Montreal	Toronto	Ontario	Canada
1939	8,759	10,174	13,618	31,617
1946	18,828	19,907	30,402	69,248
1951	29,185	32,272	47,047	112,185
1952	31,720	36,607	52,717	125,197
1953	34,179	42,579	59,074	137,417

Source: Dominion Bureau of Statistics, Ottawa

#### Transportation

Toronto is the transport hub of Ontario. In volume of cargo handled the harbour ranks fourth in Canada. It has a depth of 25 feet, but could be dredged to admit all ships entering the St. Lawrence Seaway, which will have a maximum depth of 27 feet. Expansion of harbour facilities is now being considered to handle the increase in shipping expected after the completion of the Seaway. The harbour is open nine months of the year.

The city is also the division point for east-west rail traffic, with lines giving direct service to all parts of the country and linking with American railways. Although railways are vital to many Toronto industries the emphasis in recent years has been on increased highway construction. The result of this policy is a more adequate coverage by road than rail in southern Ontario. The Metropolitan Region is now served by dual highways from the east, the west, and the north. A trucking service on a daily schedule from Halifax to Vancouver with a change of carrier at Toronto was instituted during 1953. The airport at Malton, 13 miles from Toronto, is the focal point of air routes in Canada.

#### Manufacturing

The gross value of goods manufactured in the Toronto area in 1950 was 92.5 per cent. of the Metropolitan Region's total. In spite of suburban growth, 77 per cent. of the Region's production came from Toronto city. While the Toronto area overshadows all its neighbours in importance, it should not be forgotten that the gross value of production of Halton and Peel counties alone, \$133.2 million in 1950, was greater than that of many whole regions.

Manufacturers in the Metropolitan Region employed an estimated 234,000 employees in 1953, or slightly more than one-third of the provincial total. Average wages, \$62.62 during 1953, were exceeded in nine other regions of the Province.

Why has Toronto grown so large in this century? The city had already reached a fair size in late Victorian times. In 1901, the 218,504 people living in Toronto accounted for 10.0 per cent. of Ontario's and 4.1 per cent. of Canada's population. By 1951, the Greater Toronto population of 1,117,470 was 24.3 per cent. of Ontario's and 8.0 per cent. of Canada's totals. This percentage distribution of the population was reached by about 1931. It is not surprising that industrialists build in an area that offers them a minimum of 8 per cent. of all Canadian sales with very little shipping expense. (Montreal contains 9.9 per cent. of the Canadian people while New York has 8.4 per cent. of the American population.) The market is proportionally larger for makers of producers' goods. Thus, an easy and obvious partial answer to the question above is that the city grew because it was already large. The sheer size of the market for all kinds of goods causes a movement towards it which automatically makes the market still larger.

What were the natural advantages of Toronto that made it the second largest city in Canada as early as 1871, before manufacturing was important? Nobody really knows why, although the city does seem to be favourably located for distribution of goods to and from the north, west and east parts of the Province. The presence of one of the few good harbours on the North shore of Lake Ontario certainly helped to concentrate trade that might otherwise have been spread among several towns. These slight advantages were increased when the railways used Toronto as a junction point after 1853.

The harbour is the fourth most important in Canada in terms of tonnage handled. Montreal, Vancouver, and Hamilton handle more freight. Toronto-Port Credit handled a total of 5,695,986 tons of freight in 1952. This consisted almost entirely of coal (mostly soft coal) or oil brought in from other provinces or countries. Very few goods were shipped out. Thus the harbour derives its importance largely from the presence of the city, with its voracious appetite for fuel, and not the other way around.

Until 1949, a large proportion of new manufacturers located in the Metropolitan area. This pattern has changed slightly since then as shown by the following table.

	1949	1950	1951	1952
New Industries Greater Toronto	47	<u>78</u>	<u>92</u> 25	126
Other Ontario Areas	16	52	67	89

The following firms which have built or are building plants in Toronto are, perhaps typical of newcomers. These are: Canadian S.K.F. (Sweden, ball and roller bearings), Barber-Greene, (U.S.A., Materials handling and road-building machinery), Exide Batteries (U.S.A.), Clyde Tube Forgings (U.K., pressure piping for petroleum, chemical, and marine engineering), Somerville (Canada, automotive panels), Canadian Stackpole (U.S.A., electronic components), Mall Tool (U.S.A., chain saws, portable power tools), Ansco (U.S.A., partial manufacture of photographic materials), Molson's Brewery (Canada), Consumers Glass (Canada, containers) Upjohn (U.S.A., ethical drugs) and Lennox Furnace (U.S.A. furnaces, air conditions). New industries established in the Metropolitan Region total sixtytwo in 1953.

While the number of new Canadian-owned firms has increased sharply since 1945, many are still foreign-owned - largely American and (since 1951) British. American manufacturers are said to have a greater investment in the Toronto area than in any other city outside the United States.

In 1951, 78.3 per cent. of the total Metropolitan Region's labour force worked 50 weeks or more, the highest figure in the Province. Manufacturing employment indices, however, show more variation. In 1951, the lowest point on the manufacturing index, 107.7, was 2.8 per cent. below the highest point, 111.8, while in 1952 the difference was 9.8 per cent. This was a slightly greater deviation than that shown by province-wide manufacturing employment in the latter year. This was 8.9 per cent.

In 1950, the Region's gross value of production was 32.0 per cent. of Ontario's and 15.8 per cent. of Canada's manufacturing. It is interesting to compare these percentages with those given above for employment, and with wages and salaries of 1950. Metropolitan Region manufacturers paid \$502.4 million in wages and salaries in 1950, 35.6 per cent. of those paid in Ontario and 18.1 per cent. of Canada's.

Presumably the Region's gross value of production would be higher if it included more highly mechanized industries, i.e. blast furnaces, pulp and paper mills, oil refineries, chemical plants, etc., where the value of product per man is very high. The other figures require little comment.

Comparisons in the table below may help in giving some perspective to the Toronto area's size and importance. The cities chosen are similar in size and in industry to Toronto, but none can be regarded as a carbon copy of the others.

Metropolitan	7.	Emmlarrood	Net Value
Area	Firms	Employees	\$1000
Buffalo	1,694	183,876	1,023,231
Toronto	4,348	187,223	915,544
Montreel	4.546	217,522	971,259

The Canadian figures are for 1950, and the American for 1947. The gross value of production is simply the manufacturers' receipts from the sale of goods (sales tax excluded), while the net value of production is the gross figure less the cost of fuel and materials. American authorities refer to it as net value added by manufacture. The result more or less disentangles manufacturing costs from the costs of mining, lumbering, farming and other primary industries. The gross value of production per employee (\$10,815) was only 5.3 per cent. higher in Toronto than in Montreal (\$10,266) while the average net value of production was 9.5 per cent. higher (\$4,800 as a mainst \$4,467) in Toronto as compared to Montreal. This was, pernaps, one of the main reasons why a range manufacturing wager and salaries in pernaps, one of the main reasons why a range manufacturing wager and salaries in Toronto were 7.1 per cent. higher (\$2,480 as against \$2,500) than in Montreal. However, average factory salaries and wages in Buffalo (\$3,031) in 1947 were 56 per ever,

cent. higher than they were in Toronto that year, and 22 per cent. higher than they were in Toronto three years later. This is not to imply that real incomes in the two cities varied as much as money incomes did. The high cost of services, for example, in high income areas like Buffalo tends to reduce this gap in living standards, but no precise measurements of this are available.

More than three-quarters of the manufacturing firms in the Toronto area have less than 50 employees, only 351 (1950 figures) hiring more than 100. However, the latter accounted for 62.1 per cent. of the employees and 67.8 per cent. of the gross value of production.

What is produced in the Toronto area? Nearly everything. A long list of everyday articles -- soap and toothpaste, soup and macaroni, sausages, beer, gin, shoes, suits, carpets, jute bags, cloth of all kinds, corsets, window sashes, furniture, paper, typewriters, alarm clocks, motor cars, hot water tanks, television and radio sets, bicycles, paint, fertilizer, fountain pens, jewellery, brooms, neon signs, toys, and umbrellas.

The food and beverage products industry had the greatest dollar value-\$480.9 million in 1950, which was 23.7 per cent. of all manufacturing in the Metropolitan area. The largest fraction -- about 40 per cent. of this value -- comes from meat packing (mostly Swift Canadian and Canada Packers). In addition many other firms supply a great variety of foods for the local markets.

The second most important industry in terms of dollar value was iron and steel products. The total, \$261.6 million in 1950, was 12.9 per cent. of Toronto's manufacturing. This included goods with little in common except their raw material, which was not made in this Region. Twenty-eight per cent. of this total came from industrial machinery -- most of Ontario's industrial machinery. Products include conveyers, machine tools, farm machinery, and much special purpose equipment for various industries. Other goods in the iron and steel category are hoilers, bridges and platework, hardware, tools, heating and cooking equipment, iron castings, household and office machines, and sheet metal products.

Closely allied with this field is the electrical apparatus industry. The gross value, \$203.2 million in 1950, was 10 per cent. of the area's production. This was also about 35 per cent. of the value of all electric equipment built in Canada. Products were mostly appliances, not heavy machinery. Well known firms in this field include: General Electric, Addison, Crosley, Admiral, Hallicrafters, Motorola, Philips, Stromberg-Carlson, General Motors (Frigidaire), Sangamo, Ferranti, Moffat, Thor, Lincoln, Amalgamated Electric, Square 'D', and Lucas Rotax.

Toronto is the provincial centre for the printing and publishing industry. The 1950 value of its products (\$147.9 million) accounted for most of Ontario's and about 39 per cent. of Canada's printing. This also includes engraving, lithographing, electrotyping but not blueprinting. The Canadian Almanac lists 208 publications printed in the Metropolitan area (Montreal has 142). Included are three newspapers, several national trade and professional journals, national magazines, religious papers, and a sizeable foreign language press.

Besides these industries, Toronto is the centre of Ontario's aircraft industry, represented largely by the two Britishfirms, A.V. Roe, and De Havilland (A.V. Roe is in Toronto Township, Peel county, just outside the Metropolitan area). Employment and production figures in this industry vary greatly from year to year. In 1950, these two firms employed a total of about 4,800. This figure nearly doubled in 1951, while in 1953, A.V. Roe expanded to use about 14,000 and DeHavilland employed about 2,200. Average salaries and wages in this industry (Ontario, 1950) of \$2,879 were noticeably higher than the average for all Toronto area manufacturing. This may be due to the combination of high skill and impermanence which is characteristic of the aircraft industry. Production of planes and parts in Ontario totaled \$24.0 million (largely parts) in 1950, and \$56.9 million in 1951. This was, for each year, about one-half of the total Canadian output in the aircraft industry. No recent figures are available as to the number of machines built. The Federal Government has recently announced plans to stabilize production (and employment) at about the present level.

ESTIMATED NEW INVESTMENT IN MANUFACTURING (Thousands of Dollars)

TORONTO METROPOLITON AREA -----

	Per Cent.	Toronto of	Cutario Conala	11.6	15.6	13.5	10.4	9.6	8	80.00	4.8	1.6
	Per	Toron	Critario	22.9	30.7	26.2	20.7	21.6	20.8	17.8	16.3	17.8
	Metropolitan	Montreal	Ictal	149,697	70,796	109,936	124,521	112,429	104,674	124,548	130,097	113,988
			Total	44,726	80,056	108,267	94,863	85,701	85,+62	102,504	117,725	122,716
	Capital, Repair and Maintenance	Machinery	& Equip t	1	45,913	65,780 108,267	63,755	64,415	63,532	73,221 107,504	76,604 117,725	78,931 122,716
	Capit and	Con-	struction.	1	34,143	42,487	31,108	21,286	21,932	34,283	41,121	43,785
5 7	renance	Sub-	Total	23,109	25,413	31,823	32,896	32,033	31,557	38,319	39,176	40,176
	Repair and Maintenance	Machinery	struction & Equipit	1	15,880 2	23,215	24,521	24,815	25,22	30,791	29,748	30,854 1
1 1 2 2	Repai	Con-	struction	1	9,533	8,608	8,375	7,218	6,345	7,528	9,428	9,322
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0	Sub-	Total	21,617	54,643	76,444	61,967	53,668	13,107	69,185	78,549	82,540
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Capital Expenditures	Machinery	\$ 50 ip	13,303	30,033	42,565	39,234	39,600	38,300	42,430	46,856	48,077
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Capit	Con-	.11	8,314	24,610	33,879	22,733	14,068	17,587	26,755	31,693	34,463
				1945	1946	1947	1948	1949	1.50	1951	1952	1953

Source: Department of Trade and Commerce, Ottawa

Note: 1952 and 1953 figures are subject to revision

The amount of new manufacturing investment may give a clue as to the future of an area. As shown by the table, investment in the Metropolitan area has stayed at a fairly high and steady rate (excluding 1945 when materials were scarce) since the war ended. Steady spending on repairs has tended to modify the violent shifts, associated with purchases of new capital equipment and buildings.

Toronto and Montreal then, seem to be gradually losing their dominant positions (another war might upset this pattern) in manufacturing although both will continue to be of great importance. Ontario as a whole is not losing its pre-eminence, however. Fifty-one per cent of new manufacturing investment in Canada was made in this Province in 1946, and 51.3 per cent. in 1953.

The amount invested in 1950 per \$100 of sales varied widely among Toronto industries. Chemicals were the highest (\$5.92), clothing the lowest (\$1.60), with other industries as follows: printing and publishing (\$5.19), iron and steel products (\$5.00), food (\$4.42), rubber (\$4.31), and electric equipment (\$3.40). Total new investment by the electrical industry rose sharply (from 1950 to 1952, from \$6,977,000 to \$14,326,000) as did that by the rubber industry (from \$3,546,000 to \$6,966,000). New investment by the food industry rose slightly, chemicals and clothing were almost unchanged. New investment in printing and publishing was less than in 1950.

The new Ford assembly plant in Oakville, covering  $32\frac{1}{2}$  acres, has the largest area of any single factory building in Canada. This plant, costing more than \$30,000,000 employs about 2,500 at its present production level. Ultimately 4,000-5,000 will be employed. The general location of the factory was determined by the Company's desire to be near its largest market and also near the body stamping plant at Buffalo. Approximately 36 per cent. of the Company's Canadian sales are within 200 miles of Toronto.

Oakville has a number of smaller plants producing a wide range of goods such as: electric light bulbs, patent medicines, jams, paint, ink, rubber products, industrial refrigeration equipment, dehydrated fruits and vegetables.

The largest employer in Georgetown is the Smith and Stone plant with more than 500 employees, manufacturing electrical equipment (porcelain and metal). There are also two paper mills, Alliance, and Provincial Paper, making book, writing and coated papers. These have about 200 employees each. Other industries include textiles, and textile machinery, and wood products.

The most important industry in Peel County, A.V. Roe, has already been mentioned. The British-American Oil Company's refinery is located at Clarkson, near Port Credit. This plant, employing about 600, supplies a considerable share of the Region's gasoline, diesel oil, lubricants and, since last year, grease.

Shoes, furnaces, air conditioning, and paper products are among the most important manufactures of Brampton. Paper products include boxes, loose leaf systems, paper cups and gummed papers.

#### Mining

Although mining is of little importance compared with other Metropolitan industries, the 1952 output of \$14,519,848 (2.3 per cent. of the Provincial total) was the fourth highest of all the regions. This consisted entirely of structural materials - one-fifth of Ontario's structural materials was mined here --including most of the bricks, sewer pipe, chimney flues, and other clay products. The size of these figures is due to a favourable combination of clay and gravel deposits, and the very large market created by an expanding Toronto.

#### Agriculture

The important influence on agriculture in the Metropolitan Region is, of course, the presence of the Toronto market. The type of farming varies in three strips, roughly parallel to the lakeshore, which appear to be defined as much by distance from the city as by growing conditions.

The first division is a narrow plain of sandy soil edging the lake from Hamilton to Toronto. Here are grown apples, strawberries, sweet corn,

tomatoes and other special crops for the Toronto market.

Away from the lakefront is the dairy belt. Most of this belt is a slope to the south with deep, gently rolling, loamy soils in Scarborough, Markham and Vaughan Townships becoming less productive and harder to till west of Toronto. Beef cattle and hogs were the chief sources of income in the general farming originally carried on here, and are still important. However as the Toronto milkshed has extended, dairying has become dominant. In Scarborough Township and near Georgetown, truck crops and fruit growing is taking the place of dairying. Also in this area is the town of Brampton, where greenhouse establishments growing flowers are an important source of employment. Most of the \$1.4 million derived from greenhouse products in Peel County comes from Brampton.

In the centre of this southern slope is about 300 square miles of clay soil. This area was settled soon after the founding of Toronto and became a noted wheat growing area for the Toronto market and export to the United States. Now crossed by a number of provincial and county highways and within easy trucking distance, it has become a well developed part of Toronto's milkshed.

North of the dairy belt lies an area of general farming where livestock and livestock products are the main source of farm income. Most of the land here is sandy, gravely, hilly and subject to blowing. There have been attempts to control erosion by reforestation, as in the York County forest near Vivian. Lack of streams in the area limits the usefulness of the land as pasture, but reforestation is now helping to maintain the water table. The livestock economy is supplemented by potatoes and rye.

General farming with an emphasis on beef cattle is also carried on in the portion of Halton County northwest of the Niagara Escarpment, which runs from the southwest to the northeast corner.

There are centres of specialization in the mixed farming belt. The most important of these is the Holland Marsh, which lies along the Schomberg and Holland Rivers, about half in Simcoe County and half in York County. The marsh is a shallow southward extension of the Lake Simcoe basin which has become filled with peat. Beginning in 1935, a colony of Dutch gardeners established on the marsh and a drainage scheme has been carried out to reclaim 7,000 acres of a possible 20,000 in the two counties, Simcoe and York. From the muck soil made available, remunerative truck crops have been produced. The main crops are onions, lettuce, celery, spinach, carrots and potatoes. Over 15 per cent. of the acreage is in lettuce, as lettuce is a cold air crop and the temperature of Holland Marsh is usually about 12 degrees below Toronto.

FARM VALUE OF SELECT	red AGRICUI	LTURAL PRO	DUCTS - ME	TROPOLITAN	
(In :	Thousands o	of Dollars	:)		Region
					As a % of
Products	Halton	Peel	York	Region	Ontario
Livestock on hand - 1953		0 - 6		a) ass 3	( ]
Cattle	5,007.2	8,260.2	11,054.7		6.1 6.0
Swine	465.9	584.2	1,700.5	2,750.6	0.0
Field Crops - 1953	(1.0 7	002 6	0 771 9	3,687.1	9.4
Wheat	648.7	923.6 672.0	2,114.8	2,855.1	5.9
Oats	721.5	730.7	1,136.8	2,176.2	5.7
Mixed Grains	49.1	216.2	574.5	839.8	6.6
Potatoes Hay	1,346.0	1,464.0	2,278.0	5,088.0	5.4
Poultry on hand - 1952	1,540.0	1,10110	_,_,_,	,,	
Total Poultry on hand	502.4	460.3	990.9	1,953.6	8.3
Hens and chickens	462.4	387.7	847.4	1,697.5	8.2
Vegetables and Fruits					
cultivated for sale - 1950					
Vegetables	651.8	323.8	1,517.5	2,493.1	20.5
Tree Fruits	428.1	672.6	169.4	1,270.1	10.6
Small Fruits	157.5	222.7	78.8	459.0	8.0
Products of Greenhouses,	892.8	1,539.3	1,699.2	4,131.3	50.3
Mushroom and Rhubarb House	es,				
and Nurseries					
0 1 0 0 0 0 0 0 0 0					

Source: Ontario Department of Agriculture

Nearly 21 per cent. of all the vegetables cultivated for sale in the Province come from the Metropolitan Region, and well over half of these come from the Holland Marsh. Most of the produce of the marsh is trucked directly to Toronto markets. In 1952 an estimated \$6 million worth of Holland Marsh vegetables were sold on the Toronto market. An ice packing plant began operations in the area in 1946, and considerable amounts are now shipped by refrigerator car to all parts of Canada and to cities in the United States.

In the Region as a whole agriculture ranks well behind manufacturing in economic importance. Only 2.4 per cent. of the total labour force was engaged in agriculture at the 1951 Census, compared to 35.7 per cent. in manufacturing. In Halton and Peel, farming ranks second in terms of labour force, but in York County agriculture employs far less of the labour force than each of utilities, construction, transportation and communication, trade, finance and service industry groups. The presence of a food source near the manufacturing areas has contributed to the general prosperity of the Region, however. Estimated average income was \$3,434 per farm in 1950, fourth highest in the Province.

While originally the growth of Toronto was dependent to some extent on its agricultural hinterland, today the prosperity of the farming areas in the Metropolitan counties is due to the proximity of the city. Demand makes certain food products remunerative in spite of high operation costs. As the urban area extends, incorporating what was once farming land, and good roads are built out of the city, more distant areas are devoted to feeding Toronto. Sections which once derived their income from beef cattle come within the Toronto milkshed, and parts of the dairy belt find it economic to convert to truck gardens.

#### THE BURLINGTON REGION

#### Introduction

The Burlington Region of Ontario, comprising the counties of Brant and Wentworth, and the town of Burlington, is located at the head of Lake Ontario, bounded on the south by the Niagara Region and on the north by the Metropolitan Region. Geographical location and topography have been important determining factors in the development of this Region. It was host to large numbers of United Empire Loyalists during and after the American Revolutionary War. The most colourful historical figure of the Region was Joseph Brant under whose leadership the Six Nations Indians came to Canada from the Mohawk Valley after the war. These tribes settled on the banks of the Grand River in what is now Brant County on lands granted by the government. When they found themselves land-poor on their new reservation, the Indians sold large tracts of land to incoming United Empire Loyalists.

The City of Brantford grew out of the need of the pioneers for a local trading centre. Although situated not far from Hamilton, Brantford is not, and never has been a satellite of that city. On the contrary the city has developed a character of its own that makes it one of the most colourful communities in the Province. Its manufacturers, particularly of farm implements, command a world-wide market. The proximity of the Indian reservation, as well as the city's international fame as the birthplace of the telephone draws large numbers of tourists annually, while the fact that several circuses and carnivals make their winter headquarters in Brantford gives the city an air of colour and exhuberance lacking in most manufacturing centres.

As the flood of Loyalists continued to pour into the country at Niagara and pushed northward, other communities developed. Of these, Dundas was the most important during the early years of the last century. Manufactured goods brought up the lake and through the Desjardins Canal by schooners were here exchanged for return cargoes of flour and farm produce some of which, trans-shipped at Kingston and again at Montreal, eventually found their way to England. The building of the railway into Hamilton in 1853 marked the end of the supremacy of Dundas and the beginning of the rise in importance of Hamilton.

The site of the City of Hamilton was originally determined by the fact that all land transportation routes were forced to centre on it. All eastwest traffic was obliged to traverse the narrow plain lying between Lake Ontario on the one side and the Escarpment on the other. At the same time all traffic

from the north was restricted to still narrower Burlington Heights. The subsequent growth of the city can be explained largely in terms of progress in transportation facilities. Formerly an important port for steamships, the city received its greatest stimulus for growth from the completion of the Great Western Railway. In 1859, the Great Western shops were built in Hamilton, and at that time, were the largest railway repair shops in Canada. Up to the turn of the century, Hamilton's prosperity was based on its railways which, in turn, made the city a favourable location for manufacturing. Thus, before the end of the nineteenth century, Hamilton had become an important manufacturing centre. Located in the midst of a moderately rich farming and fruit district, with an excellent harbour (Canada's third port in terms of tonnage handled) and unexcelled transportation facilities both by water and land, and with large quantities of cheap hydro-electric power readily available, it was not surprising that Hamilton should become a leading industrial centre.

The location of the leading primary iron and steel centre of Canada at Hamilton was largely the result of geographical factors. Iron ore is shipped from ports on Lake Superior and coal is readily transported by water from nearby United States ports. Large quantities of limestone used in the manufacture of steel are available from conveniently located quarries. The final products find ready markets in the many steel-using industries of southern Ontario. Over the past few years, large numbers of secondary steel industries have found it convenient to locate in the Hamilton area or in the nearby Niagara Region.

The present large-scale industrial development at the head of Lake Ontario stretching from Oshawa to the Niagara Peninsula has the Burlington Region as its geographical centre. Much of this industrial expansion has been attracted to this area by the presence of the iron and steel industry. The future completion of the Great Lakes-St.Lawrence Waterway will add enormously to the strategic importance of the Burlington Region.

#### Population

The Burlington Region is Ontario's second most populous region, containing 7.4 per cent. of the total population of the Province and including the second largest urban centre in Ontario. The estimated population of the Region was 365,000 in 1953 of which 283,000 was in Wentworth, 75,000 in Brant, and approximately 7,000 in the town of Burlington.

The population of greater Hamilton was 259,685 in 1951, an increase of 31 per cent. over the decade 1941-51. Greater Brantford, with a population of 36,727 in 1951, recorded a similar increase over the period. The town of Burlington increased 58 per cent. during the decade. These centres, together with Dundas and Paris, constitute the chief urban communities. In 1951, 88 per cent. of the population was classed as urban.

Of a total population of 344,957 in 1951 in the Burlington Region, 237,216 or 70 per cent. is of British origin. The remaining 30 per cent.is made up of nineteen nationalities. Of these, the Polish group, numbering 12,409 is the largest. However, in spite of its position as second largest group in the area, it accounts for only 3.7 per cent. of the total population.

#### Manufacturing

The Burlington Region ranks as Ontario's second manufacturing region, both in the value of its production and the number of employees engaged in manufacturing industries. On a per capita basis the Region's manufacturing production stood third in the Province, \$2,302 in 1950, indicating the importance of manufacturing to the economy of the area. The iron and steel industry, the most important, may be divided into primary iron and steel, located at Hamilton, and steel fabrication plants, located principally in Hamilton and Brantford. Textiles and clothing are important and well established industries in the Region. Mills were established at Paris in 1870 and at Brantford in 1872. The industry employs about twelve per cent. of the workers engaged in manufacturing in Hamilton, but its growth during the post-war period in the face of severe competition has been more modest than that of the iron and steel industry.

The proportion of the total labour force engaged in manufacturing in the Burlington Region in 1951 was 51.6 per cent., the highest of any region in the Province. An estimated 76,800 were employed in manufacturing enterprises during 1953. However, unlike the situation in most other regions in the Province, manufacturing employment has declined slightly during the past three years. The average employment indices are 107.1, 105.6, and 105.1 for 1951, 1952 and 1953 respectively. Despite this decrease in employment, average wages have continued to increase over the period. Average wages in 1953 were \$63.23

The freighters plying the busy harbour, the railways and highways, the stock piles of coal and ore, and hydro transmission towers reflect the heavy industry that is characteristic of Canada's leading primary iron and steel centre. Hamilton ranks as Canada's third manufacturing city, exceeded only by Montreal and Toronto on the basis of the number of employees working in the manufacturing industries. Factories in the city produce a diversity of products, a feature common to centres that provide the men, markets and materials essential to industrial growth. The proximity of Toronto and the Niagara frontier, the excellent harbour, the long tradition of iron products ranging from ploughs to locomotives, and the available supplies of coal and hydro-electricity have all been factors influencing the development of industry. Manufactures include: chemicals, clothing, electrical apparatus, farm implements and a variety of other steel products, canned foods, rubber goods, textiles and tobacco.

The city of Brantford, the most important manufacturing area in Brant County, ranked twelfth in Canada with the gross value of its manufactured products estimated at \$126 million in 1950. Several of the industries in Brantford have been associated with the city for almost a century. For example, Waterous Ltd. (machinery), the oldest firm, was established in 1844. The two largest companies, Massey-Harris and Cockshutt Plough, were established in Brantford in 1871 and 1877, respectively. Slingsby Ltd., one of the oldest textile mills in Brantford was established in 1872. The remarkable feature of industry in Brantford is not its magnitude compared with other large Canadian industrial centres, but its continued growth despite the proximity of Hamilton which has the advantage of a harbour on the Great Lakes.

Approximately half of Brantford's employees in manufacturing work in the iron and steel industry. The products range from iron castings to finished machinery, especially farm machinery and implements which are produced by the city's two largest companies. The remainder of the employees work in a variety of manufacturing industries, some of which market their products across the nation. The clothing, textiles and abrasives industries are important employers.

Other manufacturing centres include Paris, Dundas and Burlington. Paris, named after the placter of paris beds located in the neighbourhood, is noted for its woolen mills. Gypsum products and cement are two important manufactured products. Dundas has several machinery and tool companies. Two canning companies are located in Burlington.

A study of recorded unemployment during the three years 1950-3 shows that the number of unemployed workers (unplaced applicants) varies between 9,000 in the winter months and 5,000 in the summer. The proportion of unemployed to the total labour force of 144,830 (June 2, 1951) varies between 3.4 per cent. and 6.4 per cent. Because the labour force in Hamilton constitutes so large a proportion of the regional total, the figures relating to seasonal employment tend to reflect the situation in Hamilton. The unemployment varies slightly more in Brantford. The concentration of the farm implements industry in that city means that the economy is vulnerable to the vagaries of international trade as well as seasonal disturbances. The present farm implement industry slump, responsible in the main for the current unemployment in Brantford, is an instance of international as well as seasonal market difficulties.

Eleven new industries were established in the Burlington Region during 1952. The new undertakings involved an estimated investment of \$1,325,000. The new products to be manufactured include heavy presses, metal stampings, aluminum foil and packed meats in Hamilton; forgings, pipes and brick in Brantford; insecticides in Dundas, metal stampings in Paris, and games equipment in the town of Burlington. Eight new plants were established in the Region during 1953.

# The Primary Iron and Steel Industry

The iron and steel industry was established in Hamilton a century ago when local foundries made locomotives and rolling stock for the Great Western Railway. When the railway boom slackened in eastern Canada at the turn of the century the foundries turned to other products, but the tools and techniques of steel fabrication continued to centre about Hamilton.

In 1895, the Hamilton Blast Furnace Company, the first company in Hamilton to produce pig iron, was formed. This firm later combined with the Ontario Rolling Mills to form a company which today comprises the main works of the Steel Company of Canada. Hamilton was a logical choice for this development with its deep harbour, the elaborate network of railways, and the nearby extensive industrial market. Within a radius of fifty miles of Hamilton, including Toronto and the Niagara peninsula, 60 per cent. of Ontario's manufacturing is carried on.

At the present time two companies, the Steel Company of Canada and the Dominion Foundries and Steel Company, which together employ approximately 13,000 employees, produce pig iron and steel. Like most other North American steel companies, they are characterized by vertical integration, manufacturing bars, plates, sheets and other steel products from the basic raw materials. The two companies produce pig iron from five blast furnaces with an annual capacity of over 1,500,000 tons. Four smaller companies manufacture a variety of primary steel products including hot and cold rolled steel and cold drawn steel.

Two of the blast furnaces in Hamilton have only recently been built. One, the largest in Canada, has a capacity of 400,000 tons of pig iron annually. The steel facilities of "Stelco" have been increased over 50 per cent. with the addition of four new open hearth furnaces. The industry is presently spending a far greater sum for new equipment than has been spent at any other time during the past decade for expansion. Expansion in the capacity of the primary processes will tend to bring the mills and other secondary processes closer to full capacity and hence result in more profitable operation. The limited size of the Canadian market, however, makes it imperative that some special steel alloys and structures be imported since the cost of manufacturing on a small scale is prohibitive.

Steel required four raw materials: iron ore, coal, limestone and scrap iron. Ore used in Hamilton (the Steel Company of Canada uses about 1,900,000 tons annually) comes from Minnesota and Michigan. The ore is shipped in lake boats and stock-piled during the navigation season. High-grade Canadian ore mined at Steep-Rock is not used in quantity at Hamilton, probably because lower-priced American ores can be smelted more economically. Four-fifths of the 1,485,000 tons of ore mined at Steep Rock in 1951 was exported to mills in the United States. However, iron ore in Ontario at least guarantees a future supply of ore for Canadian mills, although most of it is exported at present. Coal for the mills is imported from Pennsylvania and West Virginia. Limestone, used as a flux in the blast furnace, is supplied chiefly from quarries near Beachville in Oxford County, Ontario. Scrap iron, which often accounts for as much as 50 per cent. of the finished steel ingots, is obtained from yards in Canada and the United States.

The weak link in the supply picture is coal, from which metallurgical coke is made. The quality of the coal has declined noticeably over the last decade while the price has increased. It is probable, however, that metallurgists will evolve processes that do not require high quality coke. Some pilot plants using low-shaft blast furnaces are in operation in western Europe and the U.S.S.R. The furnaces have used poor coke with some success and the design of Canadian furnaces may eventually have to be modified in this direction.

The steel companies in Hamilton represent the largest concentration of primary iron and steel manufacturing in Canada. They represent the major portion of the nation's steel furnace capacity and over 45 per cent. of the blast furnace capacity. The mills are the most completely equipped and produce the most diversified variety of plate, rod and sheet steel in Canada.

# ANNUAL PRODUCTION OF PRIMARY IRON AND STEEL (Million Net Tons)

	Pig :	Iron	Steel Ingots	& Castings
YEAR	Ontario	Canada	Ontario	Canada
1941	1.11	1.53	1.87	2.71
1942	1.51	1.98	2.21	3.11
1943	1.41	1.76	2.18	3.00
1944	1.46	1.85	2.25	3.02
1945	1.40	1.78	2.12	2.88
1946	1.08	1.41	1.78	2.33
1947	1.61	1.96	2.25	2.95
1948	1.69	2.13	2.44	3.20
1949	1.68	2.15	2.37	3.19
1950	1.80	2.32	2.53	3.38
1951	2.07	2.55	2.62	3.57
1952	2.29	2.68	2.80	3.70

Source: Dominion Bureau of Statistics.

#### Mining

Mining in the Burlington Region is confined largely to the production of natural gas, clay products (Wentworth) and structural materials. Of these, limestone, for use in the construction industry is the most significant, having a value in 1952 of \$1,514,907 for 1,387,507 tons. Among the clay products, brick was the most important, accounting for about one-third of the total value of \$1,720,837. Other clay products included structural tile, sewer pipe, and pottery (\$276,609 in 1952 as against \$112,420 in 1951). Nearly all of these products are confined to Wentworth County. Brant has a small trade in natural gas, sand and gravel.

#### Agriculture

The most striking physical feature of the land in the Burlington Region is the Hamilton Mountain, part of the Niagara Escarpment, which parallels the western end of Lake Ontario in Wentworth County. The narrow strip of fertile land between the Escarpment and the lake is a section of the Iroquois plain which is associated with fruit-growing in Lincoln County. To the west of the Escarpment, most of the area consists of the northern arms of the Norfolk sand plain. This light sandy soil is fertile, well drained and suitable for field crops and vegetables, including fall wheat, oats and potatoes.

Following the lead in Norfolk County, flue-cured tobacco culture has been introduced, and rye, a rest-crop, is cultivated over an approximately equal acreage. The sand plain in Brant is divided from north to south by rough stoney moraine formation which is best suited to pastures and forest. The southwest sections of both counties form part of the Haldimand clay plain, characterized by heavy, poorly drained soil. Both of these areas are best suited to cattle raising and dairying. The proportion of cattle in the whole Region was only 2.5 per cent. of Ontario's total at June 1, 1953, while the value of all field crops was 3 per cent. The plain in the north section of Wentworth County has only a thin layer of soil over the becrock. The soil here is poor and is best suited for forest or pasture.

The climate of the Burlington Region is temperate, with a low mean temperature of about 21 F. in January and February and an average high temperature of 71 in July. The proximity of Lake Ontario exerts a modifying influence in both summer and winter, and extends the frost-free growing period. The precipitation is adequate in the Region, with an average annual rain-fall of thirty-one inches.

The fertile soils covering most of the Region, and the moderate climate, favoured the establishment of permanent settlement based on agriculture, after the arrival of the United Empire Loyalists. The early farms, hewn from the forest, were unspecialized. Almost all the food and clothing required by the pioneer families was grown or raised on their farms. Grain, especially wheat, ground in local

mills and transported by water to the United States, was the chief export from the early farms. The farming of today is more selective than formerly, and the choice of products more dependent on the characteristics of the soil. Fruit trees, especially plum, pear, cherry and apple, are grown extensively along the south shore of the lake in red clay soil. Grapes are the most important small fruit grown. In 1951, 3,215 acres of grapes were planted in Wentworth County, about 15 per cent. of the provincial total.

Tobacco is grown in the sandy areas of Brant County. In 1951, for example, 7,890 acres of flue-cured tobacco were planted, approximately seven per cent. of the total acreage in the Province. Coincident with the introduction of tobacco, the value of the rye grown in the Region increased to eight per cent. of the value of the provincial total. Fall wheat and oats are the most important cash crops, followed by potatoes. Dairying and cattle-raising are also carried on extensively. Net farm income in 1950 was estimated at over \$3,000 per occupied farm, making Burlington the fifth highest Region in the Province in this respect.

The towns that grew up following the influx of settlers were dependent on the fortunes of local agriculture. They flourished in the first instance as distributing, milling and manufacturing centres catering to the requirements of local manufactured products, but it was the local farms which originally provided the market and later the labour for the industry that was to follow. Agriculture is no longer the most important economic activity. Only five per cent of the labour force was employed in agriculture in 1951, compared to 51 per cent. In manufacturing, and only 6 per cent. of the population lived on farms.

# FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS BURLINGTON REGION (in thousands of dollars)

	(	,		Region as a % of
Products	Brant	Wentworth	Region	Province
Field Crops - 1953 Wheat Oats Rye Mixed Grains Potatoes Corn for fodder Hay	1,108.8 1,034.7 156.0 319.3 257.3 293.8 1,456.0	862.1 792.0 15.5 294.1 529.9 184.3 1,587.0	1,970.9 1,826.7 171.5 613.4 787.2 478.1 3,043.0	5.0 3.8 8.6 1.6 6.2 4.5 3.2
Livestock on hand - 1953 Cattle Swine	5,168.6 450.8	5,771.7 244.7	10,940.3	2.8 1.5
Poultry on hand - 1952 Total	318.3	563.0	881.3	3.7

Source: Ontario Department of Agriculture

# ESTIMATED AREA, PRODUCTION AND VALUE OF COMMERCIAL FRUIT CROPS IN THE BURLINGTON REGION - 1952

Fruit	Acreage Acres	Production	Value \$000(1)	Burlington Production as a % of Ontario
Apples	2,000	269 bu.	246	11.3
Cherries	360	19 bu.	63	16.9
Strawberries	260	650 qts.	130	6.8
Raspberries	125	275 qts	96	8.5
Cantaloupes	145	51 bu.	85	16.9

(1) Estimated at average yearly prices received by growers for fruit crops grown in Ontario west of Toronto, 1952.

Source of Original Figures: Ontario Department of Agriculture.

#### THE NIAGARA REGION

#### Introduction

The Niagara Region, Ontario's most highly industrialized area, comprises the counties of Lincoln and Welland in the eastern section of the Niagara Peninsula. Its history has been characterized by war, rebellion and political events of national importance.

The Region first came into prominence when the French explorer, La Salle, constructed a stockade, later known as Fort Niagara, on the east side of the Niagara River. This gateway to the interior of the continent formed an important link in the line of French forts extending as far south as Mexico. During and after the American Revolutionary War, some 1,200 families took up residence in the area. Their independent spirit and intense loyalty to the Crown helped to bring about the passage of the Constitutional Act of 1791 which divided the country into Upper and Lower Canada. Newark (now Niagara-on-the-Lake) was the site of the first parliament of Upper Canada, which was opened by Lieutenant-Governor John Graves Simcoe.

The Region's strategic position during the war of 1812-14 brought about its almost complete devastation and places such as Queenston Heights and Lundy's Lane became famous battle gounds. This area also figured in the rebellion of 1873 and the Fenian raids of 1866. Later, the factor of strategic location which had often retarded the Region's early growth became one of the bases of its industrial strength.

#### Population

Occupying the smallest land area of any Region in the Province i.e. 719 square miles, the Niagara Region has an estimated population of 242,000 (1953) 4.9 per cent. of the Ontario total. This Region led all others in the Province with an intercensal increase, between 1941-51, of 33.8 per cent. This compares favourably with the provincial increase of 21.4 per cent. over the same period. Both counties which comprise the Region are predominately urban. In 1951, 67 per cent. of the population was classed as urban, and many people included in the rural group are essentially in suburban rather than farm categories.

There are seven centres with population exceeding 10,000 within the Region. Greater St. Catharines, the largest urban centre, had a population of 67,065 in 1951. Also one of the fastest growing in the Region, it recorded an intercensal increase of 44 per cent. Two smaller centres, Merritton and Port Dalhousie however increased 58 and 52 per cent. respectively. The seven larger centres, together with the 1953 estimated population of the city proper and listed in order of size are as follows: St. Catharines (39,200), Niagara Falls (25,200), Welland (15,800), Port Colborne (13,300), Fort Erie (8,100), Thorold (7,100) and Merritton (5,100)

#### Manufacturing

The size of the Niagara Region is by no means an accurate indicator of its importance as a manufacturing area. The per capita gross value of manufactured products in the area, \$2,508 in 1950, is higher than in any other Region in Ontario. The products from Niagara mills and factories, which range from pig iron to flour and canned fruits, amounted to 8.1 per cent. of the value of the manufactured products in the whole Province. The heavy industrial products: refined nickel, tool and machine steels, stainless steel, pig iron and ferroalloys, heavy steel fabrication including ship-building, chemicals, abrasives and pulp products, are producers' goods vital to the nation. In addition to the importance of its products, manufacturing forms the backbone of the Region's economy. Manufacturing payrolls, an estimated \$149.3 million in 1953, are by far the most important source of income, while estimated net farm income and mining payrolls each account for less than one-tenth of the manufacturing payrolls.

The most important manufacturing industries, in terms of the gross value of their products, are the nickel refining and the heavy steel industries located principally in Port Colborne and Welland, respectively. The International Nickel Company operates the largest nickel refinery in the world at Port Colborne. Canada Furnaces, in the same town, produces pig iron and ferro-alloys from two blast furnaces with an annual capacity of 223,000 tons. Two plants in Welland (city) produce steel and steel products from nine electric furnaces with a combined annual capacity of 175,000 tons. One of these companies, Atlas Steel, has pioneered the development of stainless steel and is Canada's sole producer of stainless steel sheets and bars. Five other companies in the Region manufacture iron castings and several others, chiefly in Welland and adjoining Crowland Township, specialize in heavy iron fabrication, including Page-Hersey Tubes, which manufactured sixteen-inch pipe for the Alberta-Great Lakes oil pipe-line.

Diversified light industry, particularly metal fabrication, is characteristic of St. Catharies, the largest manufacturing centre of the Region. Over 50 per cent. of the 30,000 employees engaged in manufacturing in the Greater St. Catharines area make automobile parts or steel fabricated products, including heavy machinery and tools. Mackinnon Industries with over 3,400 employees, the largest employer in the Region, manufactures automobile parts and allied products. Three large companies manufacture electrical apparatus, while textiles, canneries and wineries are also important local industries. Thorold and Merritton, near St. Catharines, are noted for their pulp and paper mills. Five mills in Thorold, including the Ontario Paper Company which has approximately 1,200 employees, employ about 80 per cent. of the workers in the town. In Merritton over half of the town's 2,000 workers are employed at Hayes Steel Company and 35 per cent. in two local paper mills. The North American Cyanamid Company with 2,400 employees in two plants at Niagara Falls, is an important manufacturer of chemicals and fertilizers, including ammoniam nitrate. Of the seven plants producing artificial abrasives in Canada, two are located in Niagara Falls, one at Chippawa and one at Thorold. These four plants, utilizing the adequate power available in the Region for fusing abrasives, give rise to Ontario's \$30 million abrasive products industry.

Wheat, unloaded from lake freighters at Port Colborne, is milled at the Maple Leaf Flour Mill, which covers two and one-half acres and which has an adjoining grain elevator with a capacity of 2.3 million bushels, said to be the largest in the British Commonwealth. The fruit grown on the narrow strip of land north of the Escarpment, is processed in eighteen canning factories. During the season, canning factories in the vicinity of St. Catharines and Niagara-on-the-Lake employ an estimated 2,300 workers.

Fort Erie, located at the source of the Niagara River, is also an important manufacturing centre. It is the home of Canada's largest refiners of precious metals for dental use. Other products include fishing lures, fabricated towers and storage companies. Its strategic location with respect to Buffalo, New York has made it one of Ontario's chief ports of entry from that country.

The industry distribution of the labour force in the Niagara Region is similar to that of the Burlington Region, where a high proportion of the total labour force is engaged in manufacturing. In Niagara the percentage was 47.0 in 1951, the second highest in the Province. In 1953 there were an estimated 42,600 employed in the manufacturing plants of Niagara Region. By way of comparison the

number in 1950 was 36,300. During the post-war period the Region was one of the fastest growing industrial areas in the Province. During the last four years the pace has slackened slightly, but the index of manufacturing employment shows an increase of 16.7 per cent. in the period 1949-53 compared to 14.5 per cent. in the whole Province.

Average salaries and wages in the Region tend to be relatively high, probably because of the importance of the iron and steel industry. In 1953 average salaries and wages were \$66.55, the highest in southern Ontario except in the St. Clair River Region.

A study of the number of unplaced applicants registered with the Unemployment Commission over the period 1950-53 reveals that the number normally varies between about 3000 during the summer months and 6000 in winter. This represents 3.5 and 7 per cent. of the total labour force. Manufacturing employment indices show a variation of 6.4 per cent. during 1953, which indicates roughly the magnitude of employment fluctuations in the Region.

During the last three years (1951-53) sixteen new plants were established in the Niagara Region and a number of existing plants enlarged their facilities.

## Hydro Electricity

Niagara Falls, in addition to being a scenic wonder, is also the source of hydro-electric power to the amount of approximately 1,000,000 horse-power. The present hydro expansion programme, to be completed about 1957 will more than double this capacity and give Ontario the largest supply of waterpower produced at any single site in the world.

It is possible to over-estimate the importance of hydro-electricity as a factor influencing the location of general manufacturing industry, since alternating current can now be transmitted economically over long distances at high voltage. The cost of power to Niagara Falls and the city of Welland, for example, is not substantially lower than that to Toronto and Hamilton. Nevertheless, where electricity is consumed in unusually large quantities, as in electric furnaces and metal refining, an adequate source of power near at hand is essential.

The electricity generated at Niagara has attracted steel and abrasives manufacturers which require electric furnaces, as well as chemical and metal refining companies with heavy electrical installations. Twenty-five companies in the region have individual contracts with the Hydro-Electric Power Commission of Ontario to supply industrial power and the Region ranks second in the Province for total hydro consumption, using 3,234 million kilowatts in 1952. Of this, 83 per cent. was absorbed by direct industrial consumers.

#### Welland Canal

Since 1829, a succession of canals, designed to overcome the obstacle presented by Niagara Falls has linked the shipping of the Upper and Lower Great Lakes. The Welland Ship Canal, opened in 1932, has the largest single canal lock in the world. The excellent docking facilities offered by an inland waterway sheltered from lake storms and deep enough for freighters, are important for industries which utilize large quantities of raw materials such as pulp, logs, coal, and ore, which can be transported economically by water.

The fact that all the important manufacturing centres in the Region, except Niagara Falls and Fort Erie, are located in proximity to the canal, suggest its importance. Way traffic on the canal in 1952 accounted for 11 per cent. of total way and through cargo tonnage. Of the way cargo received, soft coal ranked first with 406,000 tons, followed by pulpwood 404,000 tons and wheat 288,000 tons. Other cargo landed included oil, gasoline and iron ore, while 163,000 tons of newsprint and 199,000 tons of stone were shipped to other ports.

Along the old canal, in Thorold and Merritton, paper companies use lake shipping not only for pulp, logs and fuel but also to market newsprint in the mid-western States and the canal serves other industries as a method of importing coal, oil and wheat.

Thanks to the Welland Canal, the Falls of Niagara have ceased to be an obstacle and their value as the most important single asset the Region possesses can be appreciated. For not only are the Falls the source of hydro-electricity to the amount of approximately 1,000,000 horsepower, they also rank high among the scenic wonders of the world. As a result, the tourist industry derives an estimated annual revenue of \$30,000,000 from some 8,000,000 visitors, the great majority of whom are attracted to the Region by the Falls.

#### Mining

While mining provides only a small fraction of Niagara's total income, some of the products are very important in the economy of the Province. One of the first natural gas wells in Ontario was drilled near Port Colborne in Welland County. Spreading around this point, the field has since become an important source of gas for the Region. The Welland field had 583 wells in 1951, while 45 producing wells were drilled in 1952 (25 dry wells were also drilled). The production of gas in 1952 was 728, 528 M.J.F., about one-tenth of the Provincial total. The Haldimand field extends into Caistor and Gainsborough townships of Lincoln County, but separate production figures are not available.

Cement is the most important mineral product in the Region, in terms of gross value of production, being valued at \$3,015,694 in 1952, 49 per cent. of the value of all mineral production. Cement was once produced at Queenstón, but at present, the only kilns are located at Port Colborne. The production of 1,099,125 barrels in 1952 accounted for one-fifth of Ontario's cement. Quarries in Welland and Lincoln mined 1,131,137 tons of limestone in 1952, with a combined production equal to about one-seventh of all limestone quarried in the Province.

By far the largest and most important mixing industry is the International Nickel Company's smelter at Port Colborne. Statistics concerning it are credited to the Nickel Range Region.

#### Agriculture

Apart from the scenic grandeur of Niagara Falls, the Region is probably best known for its fruit orchards, although the value of fruit-growing, as an industry, is insignificant by comparison with manufacturing. Fruit-growing is concentrated in the northern part of the area, between Lake Ontario and the Niagara Escarpment, and produces an estimated eight million dollars worth of peaches, plums, grapes, cherries etc., annually. This Region accounted for 97.9 per cent. of Ontario's grapes, 94.4 per cent. of its sweet cherries and 94.0 per cent. of its plums in 1952. Tomatoes constitute the most important vegetable crop, while large quantities of spinach also are grown. In the lighter soils around Fonthill, Ridgeway and Ridgemount, fruit and truck crops are grown. Welland County is the home of three large nurseries which produce many varieties of nursery stock. One of these is the largest in the world. A number of smaller nurseries specialize in ornamental shrubs and small quantities of commercial stock.

As might be expected in a relatively small area, field crops are grown on a very limited scale, total production amounting to only 1.4 per cent. of the provincial output in 1952. Dairy farming is found chiefly along the brow of the Escarpment. It is interesting to observe that although the production of dairy products and other food products is increasing constantly, it falls far short of supplying domestic demand and the necessity of importing food products from the neighboring counties makes the Niagara Region one of the outstanding "deficit areas" agriculturally speaking. Demand for food products has increased along with the great population growth and the large seasonal influx of tourists, and the agricultural base falls far short of meeting these demands.

Thus, although the Region contains one of the most intensive horticultural areas in the Province, agriculture as a whole is of comparatively minor importance. With 3.7 per cent. of the occupied farms in Ontario, the Region's estimated net farm income in 1950 amounted to only \$10.8 million, or 2.4 per cent. of the Provincial total. Lincoln County, with its fruit belt, accounts for over \$7 million of this total. The average income per occupied farm, as well as the per capita farm income, is well below the provincial average.

ESTIMATED AREA, PRODUCTION AND VALUE OF COMMERCIAL FRUIT CROPS IN THE NIAGARA REGION - 1952

Fruit	Acreage Acres	Production ,000	Value (1) \$,000	Niagara Production as a % of Ontario
Crapes Cherries - Sour Sweet Plums Peaches Pears Strawberries Raspberries	20,600 2,460 1,200 3,940 13,000 4,900 827 250	41 tons 166 bu. 108 bu. 500 bu. 2,080 bu. 606 bu. 1,324 qts. 323 qts.	2,853 565 463 760 3,848 1,017 265 113	97.9 64.5 94.4 94.0 87.7 82.1 13.8 9.9

<sup>(1)</sup>Estimated at average yearly prices received by growers for fruit crops grown west of Toronto.

Source of original figures: Ontario Department of Agriculture.

FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS NIAGARA REGION (in thousands of dollars)

Product	Lincoln	Welland	Region	Region as a % of Ontario.
Field Crops - 1953 Wheat Oats Potatoes Corn for fodder Hay	478.1	808.9	1,287.0	3.3
	373.4	280.7	654.1	1.3
	68.3	56.7	125.0	1.0
	119.4	84.1	203.5	1.9
	1,297.0	992.0	2,289.0	2.4
Livestock on Hand - 1953 Cattle Swine Sheep and Lambs Poultry on Hand - 1952 Hens and Chickens Turkeys	2,613.6	2,663.7	5,277.3	1.3
	367.2	231.4	598.6	1.3
	60.7	54.8	115.5	1.2
	252.2	188.6	440.8	2.1
	36.8	41.9	78.7	3.9

Source: Ontario Department of Agriculture.

#### THE LAKE ERIE REGION

### Introduction

The Lake Eric Region consists of the counties of Norfolk and Haldimand bordering the north shore of Lake Eric between Welland and Elgin counties. This Region has become the leading tobacco-producing area in Canada and ranks high in the output of apples, caming crops, and livestock. Norfolk has been described as Canada's richest agricultural area. This Region is also important for fishing and for the mining of natural gas, limestone, and gypsum. While manufacturing has always been overshadowed by the primary industries (the Region has fewer employees engaged in manufacturing than any other Region in the Province), there has been a modest but steady growth in the output of manufactured goods. The Region was one of the earliest settled areas in south-western Ontario; today, the population is still largely rural and the second in the Province.

The Region has an estimated population of 70,000 (1953), two-thirds of which is located in Norfolk County. The population of that county increased with immigration to a high of 33,527 in 1881, but declined to a low of 26,366 in 1921 when farms were abandoned because of severe soil erosion and depletion. The introduction of tobacco reversed the trend, and in 1951 the population rose to 42,708 an increase of 19.9 per cent.over the last decade. The population of Haldmand has shown less fluctuation than Norfolk with 24,851 people in 1871, and 24,138 in 1951. Despite this static situation over the past eighty years, the last decade has shown a 10.5 per cent increase.

The concentration on specialized agricultural crops and on mining in the Region has resulted in a relatively small population, located principally in rural areas. Norfolk County, for example, comprises less than one per cent. of the population of the Province yet it produces six per cent of the total farm income. The Region has recorded only a 16.3 per cent population increase in the last decade, compared with 21.4 per cent for the Province as a whole. There are no cities and only three centres with over 2,500 people, which comprise 21.3 per cent of the total population.

#### Agriculture

The Lake Erie Region is the wealthiest agricultural area in Ontario. With only 4 per cent. (6,027) of the total occupied farms in Ontario in 1951, this area had an estimated net farm income of \$28 million, or 6.2 per cent. of the Provincial total in 1950. Estimated net farm income per occupied farm, \$4,644 ranks first in the Province, greatly in excess of the provincial average of \$3,023. The net farm income in Norfolk, \$22.2 million, is the highest of any county in Ontario. Successful farming in this Region is indicative of the skill with which the farmer has adapted himself to the prevalant climate and soil conditions.

The Lake Erie Region has been favoured with an excellent climate. The proximity of the lake exerts a modifying effect upon the weather, the normal January and July temperatures being the fourth highest in the Province,  $23^{\rm O}{\rm F}$ . and  $69^{\rm O}{\rm F}$ , respectively. The growing season starts as early as April 14th with the average crop season in the two counties extending for 203 days and the frost-free period lasting 153 days. The annual snowfall averages 61 inches, rainfall 33.8 inches.

Soils in Norfolk and Haldimand counties vary widely. Haldimand County soil consists mainly of heavy-textured clay with poor drainage in many sections. However, the wet sandy loams of the Dunnville area are gradually being drained and developed for vegetable crops. The better drained soils are found along the Grand River around Caledonia, on the lowland near Lake Erie, and on the sloping plain north and south of the Grand River.

Norfolk County, on the other hand, is mainly a sandy plain and as a result has experienced many changes in agriculture. The land was rapidly settled after the townships were opened from 1792 to 1812, except in wet areas. The early settlers grew the usual pioneer crops of wheat, rye, corn and peas which were very

important field crops in the 1890's. However, the light textured soils could not stand up to this regular cropping, and a trend toward canning crops and orchards increased during the first quarter of this century. With the decline in the productivity of the soil and the increase in wind erosion, farm abandonment became common between 1900-1925. However, in 1923 tobacco was grown for the first time (1) as a commercial experiment, and today, is the basis for the large per capita farm income and wealth in the county. Tobacco growing now occupies most of the warm, well-drained sandy soils and represents a good example of fitting a crop to specially adapted soils.

Over three-quarters of the farm income of the Region accrues to Norfolk County and the bulk of this income comes from the production of cash crops. The chief cash crops include flue-cured tobacco, apples, small fruits and market vegetables. Semi-specialization is pronounced in the Region where the growing of fruits particularly tree fruits, and vegetables takes place. Norfolk, one of the leading apple counties, produced 15.7 per cent. of all apples in the Province in 1952. This county ranks first in the production of strawberries, accounting for 49.0 per cent. of the provincial crop. Included among the variety of other fruit crops grown successfully are raspberries, pears, peaches and cherries, production of which amounted to 8.6 per cent 2.5 per cent, 2.2 per cent., and 3.7 per cent., respectively of the Ontario output in 1952.

Since production is limited to five months, a large processing and storage industry has been established in the Region. A modern pre-cooling and cold storage plant at Simcoe houses 300,000 bushels of apples, and during the summer acts as a headquarters for the marketing of respherries and strawberries. About 75 per cent. of the strawberries used in the processing and production of jams and preserves in Ontario are produced in Norfolk County. Canning factories at Simcoe, Waterford, Port Dover and Dunnville process the products of large areas of peas, corn and tomatoes, and smaller areas of asparagus, beans, cauliflower, cabbage, carrots, etc. Norfolk processes 95.8 per cent of its total output of tomatoes and 6.5 per cent. of all tomatoes processed in Ontario. This county also supplied 5.6 per cent. of the cauliflower crop in the Province, 3.9 per cent. of the cabbages 4.8 per cent. of the asparagus and 1.4 per cent. of the carrots in 1952.

Proceeding east in the Region to Haldimand County where heavier soil prevails, livestock and grain farming become more pronounced. The Lake Erie Region ranked first in Ontario in the production of rye and accounted for 27 per cent. of the 1952 total value of rye grown in the Province. The total farm value of field crops grown in these two counties represent 3 per cent. of the Provincial total for 1952.

Value of livestock in the Lake Eric Region constituted 2.5 per cent. of the total for Ontario in 1952. Turkeys are a major poultry item, 6 per cent. of the provincial output coming from this Region. Haldimand County produces more poultry than Norfolk, with 71 per cent. of the turkeys and 60 per cent. of the hens and chickens in the Region.

#### Tobacco

The introduction of flue-cured tobacco culture has transformed the whole economy of Norfolk County in the last quarter-century. Tobacco has recorded the greatest increase in acreage value over the period of any crop in the Province and has made Norfolk Ontario's richest agricultural county. Over half of the Province's total acreage was planted in Norfolk in 1950, giving the county a substantial lead among the producing areas. The high proportion of tobacco farms in Norfolk resulted in the establishment of tobacco-processing plants in Delhi and

From an experiment in 1923 when twenty acres of flue-cured tobacco were cultivated in the vicinity of Lynedoch, the acreage had increased to 109,495 in 1951, valued at \$63,544,000 - more than the total cash receipts for all grains in the Province. Tobacco has become the most valuable crop in the Province in terms of farm cash income. Production in Ontario accounted for virtually all the Canadian flue-cured tobacco grown, with 140,000,000 pounds out of 144,000,000 pounds in 1951.

(1) There is evidence to indicate that tobacco was originally grown by the Indian

inhabitants of the area.

The export trade with Great Britain has accounted for some of the increase in production in recent years. Exports in 1951 amounted to 23 million pounds or 14.9 per cent. of Canada's production. Import restrictions reduced sales in 1952 and the prospect of smaller exports to Great Britain and high manufacturers' inventories resulted in a 20 per cent. reduction in acreage from the average of 102,500 acres for the preceding five years. The crop harvested in 1952 in Ontario was only 81,300 acres.

However, Britain returned as a buyer in 1953, contracting for about 25 million pounds of tobacco, compared to 8.5 million pounds in 1952. Domestic demand for tobacco also rose with the decreased tax on cigarettes.

The report of the Tobacco Inquiry Commission, set up to investigate and report on conditions in the tobacco-producing industry, was released in 1928. The necessity of such a commission was evident from representations relative to the unsold 1926 crop and large quantities of the 1927 crop, still in the hands of the growers, for which remunerative prices were not offered, and representations relative to unfair prices and practices. Recommendations suggested that growers guard against over production of low-grade leaf, and produce high-grade leaf in constant quantities, which would lay the basis for securing a popular place on the tobacco market of Great Britain. The report included suggestions relative to curing, grading, organization and marketing. However, in spite of the recommendations of the report, acreage almost doubled between 1931-32 (17,000 to 27,000) and the price dropped from thirty-two to twenty cents per pound. When the crop increased by almost three million pounds in 1932, mild panic sent the price to a low of sixteen cents. Despite this, acreage again increased in 1933, but unfavourable growing conditions resulted in a smaller crop and an appreciable jump in price. In 1934, the growers who were organizing, decided to reduce the acreage from that of the previous year, and purchasing companies agreed to give preference to those who limited production. Production was reduced and the price rose better than five cents per pound over the previous season. The Natural Products Marketing Act, passed by the Dominion Government in 1934, laid the basis for the establishment of the Flue-Cured Tobacco Marketing Board. The act was declared ultra vires in 1936, and the Flue-Cured Tobacco Marketing Association of Ontario was formed to replace the board. Acreage control became a voluntary agreement, however, and some growers failed to enter. The association is unique in that representatives of both growers and purchasers belong to the association and set the price.

Since that time, production has continued to increase generally, and simultaneously with this increase, the yield per acre has risen from 800 pounds in 1928 to 1,571 pounds in 1952, as a result of the farmers enthusiastic response to improved methods. The increased use of fertilizers, the introduction of a rye rest-crop and other innovations including those discoverd at the experimental substation in Norfolk have been technical factors contributing to the increase.

Transient labour is a notable feature associated with tobacco harvesting, ranging from the leaf handlers to skilled Virginians who regulate the tobacco curing in the kilns. The 1951 crop required about fifty thousand harvesters, of whom one-third were probably migrants. This temporary influx brings social problems in its wake, particularly with regard to securing adequate food and shelter, and maintaining discipline.

The prospect for Ontario tobacco growers in the long run, remains bright. Domestic demand will always sustain a moderate acreage and sales to Great Britain increased in 1953. Improved farming methods, such as the growing of rye in alternate years, prevent exhaustion of the soil. Climatic conditions are especially favourable to tobacco culture in Norfolk County. For these reasons, it appears unlikely that the county will lose its place as Canada's foremost tobacco area.

ACREAGE, PRODUCTION AND VALUE OF FLUE-CURED LEAF TOBACCO IN ONTARIO, 1924-1952

Year	Harvested Acreage	Yield Per Acre lbs.	Production 1000 lbs.	Farm Value \$'000
1924 1929 1939 1949 1950 1951	6,849 15,060 63,820 86,252 87,330 106,300 81,303	800 600 1,180 1,324 1,193 1,317	5,479 9,036 75,294 114,161 104,179 140,023 127,435	2,620 15,285 48,234 46,590 62,121 53,025

Source: Dominion Bureau of Statistics.

# Reforestation

While the sandy soil of Norfolk is suitable for special crops such as tobacco, it is very vulnerable to erosion by wind and water. The situation was particularly serious in southern Norfolk where farms cleared by the early settlers were abandoned as the soil drifted in windstorms and creeks cut deep valleys in the fields. Reforestation meant less drifting because it provided windbreaks, increased the organic content of the soil, and kept moisture which would otherwise have run quickly through the sandy soil, near the surface.

The first Provincial Forestry Station was established in 1908 at St. Williams in Norfolk near Port Rowan. The annual distribution of trees from this station has grown from about 400,000 trees in its early days to nine and one-half million in 1950. The trees are largely conifers.—Scotch, red, and white pine are the most important. This station, the largest in Ontario, is divided into two sections; the main station covering more than 2,000 acres at St. Williams and the second station at Turkey Point with 1,950 acres. The County has reforested various parcels of land totalling 1,700 acres, and private landowners are said to have reforested a larger area than the various governments.

### Mining

This Region ranks third in the Province in producing non-metallic minerals and structural materials, principally natural gas and gypsum. The total value of output was \$5,294,122 in 1952. Natural gas was the most important item being more than one-half of the total. Structural materials, consisting of limestone, sand and gravel, were valued at \$1,589,629 in 1952. About four-fifths of this was limestone; the Region ranked second in the Province in producing this mineral.

The Haldimand field (almost entirely in Haldimand County) is the oldest and most important natural gas field in the Region. Gas was first produced commercially in 1890, when drilling began in the Dunnville area, following a successful venture at Port Colborne in Welland County the year before. At first, the wells supplied only the small towns in the area, but after 1900, pipelines were built to various cities including Hamilton and St. Catherines. Natural gas development in Norfolk paralleled that of Haldimand but on a smaller scale. The first wells were drilled in 1909 at Port Dover and Port Rowan. Although the number of wells has increased steadily there is less concentration and more area for expansion than in Haldimand, except in Woodhouse Township. In 1951 there were 361 producing wells in Norfolk and 1,920 in the Haldimand field (which has a few wells in Wentworth and Lincoln). In 1952, the Region ranked third with a total production of 2,207,065 M.C.F. of gas.

Gypsum mining in Haldimand County at Hagersville and Caledonia is unique in the Province. In 1952, 278,992 tons were mined, about one-fifteenth of the Canadian total. Haldimand also leads in extraction of limestone as a structural material, being exceeded only by the Burlington Region. Sand and gravel are also mined (mostly in Norfolk) for local construction.

In 1816, John Mason built a blast furnace at the mouth of Potter's Creek on Lake Erie, but the lack of skilled help and proper equipment caused the

venture to fail. The works were later rebuilt and operated under a different management from 1822 to 1847. Accessible supplies of iron ore, known as bog ore, came from poods and marshes in the vicinity. Power was supplied by the creek and charcoal from local farms was used as fuel. The furnace produced an average of 750 tons of iron annually during this period. Thus, the pioneers were supplied with iron implements at a time when poor transportation made them too expensive to import. Lack of charcoal forced the works to close in 1847, but they were restablished in Houghton Township in 1854 for a brief period, then abandoned because better and cheaper iron was now available from England and the United States.

The United States Steel Company spent two years and more than one million dollars prospecting for iron ore in Norfolk before the project was abandoned in the summer of 1953. The ore was found to be too low grade for commercial use.

#### Fishing

Norfolk and Haldimand are traditionally famous for commercial fishing, ranking second among the Regions (the Border Region was first) with a combined catch of 6,168,009 pounds in 1952. The lake supports a large fish population chiefly because the shallow depth and southern location permit the growth of plants which are necessary for marine life to flourish. Herring, white-fish, and blue pickerel are the most important commercial fish while small mouth black bass are popular as game fish in Long Point Bay. Fishing boats operate out of a number of harbours of which Port Dover is the largest. There are two principal fishing areas in Lake Erie used by the Region's fishermen. One, known as the "deep hole", south of Long Point tip, is an unusually deep depression in the lake bottom, about thirty-five fathoms (1 fathom = 6 feet), in a lake with an average depth of ten to fifteen fathoms. The second, located in the shallow area of Port Maitland, is important for perch as well as whitefish and blue pickerel.

#### Manufacturing

Manufacturing is of secondary importance in the Lake Erie Region, using only 18.2 per cent. of the total labour force. By way of comparison, agriculture, the leading activity uses 42.0 per cent. (1951). In 1953 there were an estimated 3,800 people engaged in manufacturing, the smallest number recorded in any region and further, the rate of increase in manufacturing employment has been smaller than that of any other region since 1939. This has resulted, in part, in an almost exclusive dependance on canning, tobacco processing, and textiles.

The chief manufacturing centres, with the gross value of their production in 1950 are: Simcoe (\$20.8 million), Delhi (gross value of production is not available), Dunnville (\$7.8 million), and Caledonia(\$4.6 million). Simcoe, the largest town, had thirty manufacturing establishments with a total of 1,344 employees in 1950, including a can manufacturing company, three food preserving plants, and a tobacco processing plant. In 1950 Simcoe accounted for 35 per cent. of the gross value of manufacturing production in the Region. Delhi is noted for its tobacco processing factory which handles a large proportion of the tobacco leaf grown in the Province. Textiles and canning are important industries in Dunnville the industrial hub of Haldimand County. Three large textile factories employ about 800 people and two canning plants over 400 employees during the harvesting season. Port Dover specializes in frozen fish products. The gross value of manufacturing products of the Region was \$59.6 million in 1950 or 0.9 per cent. of the provincial total. In the decade 1939-49 (1939 value based on total of urban areas) the value increased 122.0 per cent. compared with 249.7 per cent. for the Province as a whole.

Despite the slower postwar growth of the Lake Erie Region there are indications that the situation may improve. During 1952 a steel products company established a new plant at Caledonia, and nine other manufacturers in the Region planned additions to existing factories. The proximity of centres in Haldimand to the steel industries in Hamilton and the Niagara Peninsula could well lead to further industrial development in Haldimand County.

#### THE UPPER THAMES REGION

#### Introduction

The Upper Thames Region consists of the counties Elgin, Middlesex and Oxford in the south-western section of the Province. The Region is bounded on the south by Lake Erie, and by seven counties; Kent and Lambton to the west, Norfolk and Brant to the East, and Huron, Perth and Waterloo to the north.

The early growth in population of the Region stemmed from two tides of immigration. The first of these came from the south between 1784 and 1814 after the Revolutionary War and consisted mainly of United Empire Loyalists. The second tide of immigration spread from east to west after 1814 and originated mainly in the British Isles.

The mainstay of the economy in the early nineteenth century centred in the growing of wheat. However, a radical shift to mixed farming was sparked by the American Civil War demand for beef, cattle and hogs. Today, the Region is one of the leading livestock districts in the Province. This shift to mixed farming was partially a result of the depletion of the soil caused by the uncontrolled run-off, which in turn, was a result of the almost complete removal of the forests.

Shortly after 1826, the judicial centre of the district was transferred from Vittoria to the more convenient locality of London, giving the latter its first important impetus for growth. As evidenced by a population growth from 1,246 in 1835 to 4,000 in 1845, London was reputedly the fastest growing town in North America. A garrison town from 1838 to 1853, London today is the seat of the Western Ontario Area Command. In 1853, the Great Western Railway reached London and provided the transportation essential to the welfare of a growing community. By 1861, the indirect effects of the oil boom and the distribution of beef to the United States had boosted the population of London to 11,000 persons. Greater London's growth to its present size of 121,516 (1951) has been gradual but steady. Situated in the heart of the Region, midway between Toronto and Windsor, London has become a great manufacturing centre in the midst of a rich agricultural district which provides a valuable market for the city's products and at the same time supplies the urban centre with food.

# Population

With an estimated population of 287,000, the Upper Thames Region accounts for 6 per cent. of the Provincial total. Compared with a 21.4 per cent. intercensal increase in the total Ontario population over 1941-51, the Upper Thames Region recorded a jump of 23.3 per cent. Much of this above-average increase resulted from the growth in Middlesex County, where an increase of 27.5 per cent. was registered over the decade. Middlesex has a population three times that of either Elgin or Oxford, and the latter recorded population increases over the decade of only 20.3 per cent. and 15.4 per cent. respectively.

The urban-rural picture varies from one county to another within the Region. While Middlesex is predominantly urban (77.2 per cent.), Elgin's population is 56.5 per cent. rural and in Oxford the division is almost equal. A 23.3 per cent. jump in the regional population over the past decade in comparison with a 28.8 per cent. increase in the urban sections indicates a shift in population. This urban movement is most evident in Middlesex County where a 33.2 per cent. urban increase was recorded over 1941 compared with a rural increase of only 11.4 per cent. Closely allied with the rural to urban trend is the movement from the cities to the suburban districts. The latter trend is particularly noticeable in London where a 105 per cent. increase in the suburbs contrasted with a 22 per cent. jump in the city proper in the period 1941-51.

Five urban centres recorded populations exceeding 5000 in 1953. Listed in order of size with the 1953 estimated population, they are as follows: London (98,900), St. Thomas (18,400), Woodstock (16,500), Ingersoll (6,600) and Tillsonburg (5,700).

#### Agriculture

The basis for the sustained industrial growth of the Upper Thames Region over the past few decades has been its rich agricultural resources. The estimated net farm income of \$5\fmullion for the Region in 1950 was second only to that of the Blue Water Region, and estimated farm income per occupied farm, over \$\fmu,000\$, was exceeded only by the Lake Erie Region. A high proportion of the total area is used for agriculture. Ninety-two per cent. is occupied farm land, and 75 per cent. of this is improved, compared to 61 per cent. for the Province as a whole.

The soils in the area vary from imperfectly drained clay loams in the north to fertile light clay and sand plains in the central and southern sections. The altitude and aspect of the slopes of the Thames watershed give that part of the Region a higher rainfall and snowfall than the average for Southern Ontario. This part also does not enjoy freedom from frost as in areas bordering the lakes. Late spring seeding is sometimes necessary, but there are few summer droughts.

A wide range of crops are grown in the Region. Poultry, sheep and hogs are raised, but the chief purpose of most of the farming is to carry milk herds or to produce beef. In Oxford County, most herds are milked for cheese production. In Middlesex and Elgin, beef cattle are raised more extensively. The dominant agricultural activity of the whole Region is dairying, however. Thirtynine cheese factories, 7 per cent. of the number for the Province, were operating in the Region in 1951. In addition, there were seven processed milk factories, producing whole milk powder, skim milk powder, buttermilk powder, and evaporated and condensed milk, operating in 1952. Five of these are in Oxford County.

The area around London differs from the adjacent clay plains and knobby ridges in that it is covered with sand or other light - textured soil conducive to specialized agriculture. The London market for tree fruits, potatoes, truck and canning crops increases this tendency, although dairying remains dominant.

FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS - UPPER THAMES REGION (in thousands of dollars)

	(	111 0110 00001100 01	00110000		Region as a
Products Field Crops - 1953	Elgin	Middlesex	Oxford	Region	% of Ontario
Wheat Oats Barley Rye Mixed grain Corn for husking Corn for fodder Potatoes Soybeans Hay Livestock on hand	1,191.0 718.7 68.2 227.5 263.6 2,081.9 542.6 232.8 1,013.7 1,347.0	2,582.1 1,725.1 523.2 84.2 895.9 2,361.0 833.6 340.3 731.7 3,898.0	1,433.2 1,990.7 96.1 118.7 1,684.2 929.2 693.4 209.4 48.4 2,273.0	5,206.3 4,434.5 687.5 430.4 2,843.7 5,372.1 2,069.6 782.5 1,793.8 7,518.0	13.3 9.1 10.2 21.5 7.4 19.4 19.4 6.2 16.6 8.0
- 1953 - Cattle Swine Sheep and lambs Poultry on hand - 1952 - Total poultry on han Hens and chickens	8,645.0 1,112.6 245.2 a 511.1 413.6	21,748.6 1,580.6 446.7 1,144.4 894.4	15,087.4 1,877.8 129.0 924.9 830.9	45,481.0 4,571.0 820.9 2,580.4 2,138.9	11.4 9.9 8.3
Turkeys	84.7	215.8	71.6	372.1	16.4

Source: Ontario Department of Agriculture

The South-east corner of Elgin County is part of the Norfolk sand plain, and tobacco farms now occupy most of the warm, well-drained, sandy soils. As a result, Elgin County is surpassed only by Norfolk County in production of tobacco. Oxford County ranked third at the 1951 census.

In summary, the Upper Thames Region has been endowed with favourable climate and soils. A rich agricultural economy developed at an early period has continued without abatement. Comparatively recent expansion in the fields of commerce and industry are explainable in terms of the rich farming hinterland surrounding centres such as London, St. Thomas and Woodstock. No survey of the Upper Thames Region could afford to overlook the importance of agriculture to the area and more generally to Western Ontario.

#### DAIRY FACTORIES IN THE UPPER THAMES REGION

- 1951 -

		CTORIES		VALUI	E OF PRODUCTS	
County	No. of Est.	No. of Employees	Creamery Butter \$'000	Cheddar Cheese \$'000	Other (1)	Total \$'000
Elgin Middlesex Oxford	6 16 17	82 341 101	207.9 1,475.3 493.4	81.3 973.5 952.0	879.4 3,400.6 1,697.2	1,168.6 5,849.4 3.142.6
REGION	<u>39</u>	<u>524</u>	2,176.6	2,006.8	5,977.2	10,160.6
Region as of Provi		6.7	5.2	8.9	6.8	7.6

(1) includes fluid milk and cream and ice cream sold Source: Dominion Bureau of Statistics

# Manufacturing

Manufacturing in this Region is characterized by stability and steady growth as a result of the diversity of its products which range from refrigerators and stoves to cheese and tobacco. Factories were established in the first instance to utilize the agricultural produce of the surrounding country; grain, livestock, fruit and vegetables. In turn, the prosperous hinterland provided an increasing market for farm implements, wood products and chemicals which could be manufactured locally. The growth of transportation facilities - railroads and later highways - made possible the establishment of industries such as brewing and the electrical appliances which market their products beyond the borders of the Region, indeed, across the whole country.

In 1953, 26.9 per cent. of the labour force was included in manufacturing, a percentage which slightly exceeded the next largest categories, service (21.1 per cent.) and agriculture (17.6 per cent.). Estimated employees in manufacturing in 1953 were 29,500 or 4.6 per cent. of the provincial total. In 1939 there were only about 16,300 or 4.3 per cent. of the total at that time. In addition to the steady growth during this period, there has been an improvement in the relative importance of the Region. The seven new plants in 1952 and nine in 1953 which were established in the Upper Thames Region, indicate a trend toward diversity of products as well as increased industrial capacity. In 1950, 680 plants manufactured goods valued at \$294 million.

The strategic location of London has influenced its growth as an important manufacturing centre in southwestern Ontario. Geographically, it is about the centre of the fertile Upper Thames Valley. Within a radius of fifty miles of the city there dwell over half a million people. In this area prosperous farms supply materials for industry and small towns and cities provide markets for a variety of manufactured goods. This diversity has been apparent since the beginning of London. In 1860, for example, the industries included brewing, flour milling, foundries, clothing, furniture and wood products, tanneries, soap, tobacco and matches. The wide range of manufactured products has contributed to the steady growth and stability of the economy of the Region.

Four railroads serve the city, and highways radiate in all directions. London was chosen as a divisional point for the two transcontinental railways because the city is approximately equidistant from Toronto and Windor. The civic airport and the city-owned railway to Port Stanley on Lake Erie twenty-three miles away which gives London factories access to lake shipping, completes the transportation links with markets and industrial supplies. Cheap hydroelectric power, natural gas, and coal carried by rail at competitive rates, supply abundant fuel.

In 1950 London factories produced approximately half of the Region's manufactured goods, which are typical of those for the area as a whole. Food products, including cereals, biscuits and beer are the most important industry group. Food products plants employ 25 per cent. of the total number of workers engaged in manufacturing. Factories manufacturing iron and steel products ranked second with 16 per cent. A variety of other industries are represented, including a diesel locomotive plant, electrical appliance plant, printing, clothing, textiles, paper products and brass manufacturers. Three of the five new plants established in London in 1952 were of the iron and steel catagory.

St. Thomas is famous as the railway city of Canada for it has the distinction of being served by six railroads; the New York Central, Chesapeake and Ohio, Wabash, Canadian National, Canadian Pacific, and London and Port Stanley (electric). The railways employed about 46 per cent. of the industrial employees in St. Thomas in 1950. Important manufactures include precision tools, machinery, other metal goods, food products and pharmaceuticals. Recent factories constructed in St. Thomas include iron and steel products and pharmaceutical plants.

Manufacturing in Woodstock is characterized by a variety of products. Furniture, cheese products, and agricultural implements are of particular importance, while the production of organs is unique in the area. Ingersoll is noted for its production of cheese, iron and steel products and fertilizers. Tillsonburg is typical of the many small towns in the region, with its factories making powdered milk, butter, and processed tobacco from the produce of the hinterland and also implements, wooden crates, and fertilizer essential to agriculture. A new textile plant has located in Strathroy.

#### Finance

London is the leading financial centre in southwestern Ontario. While the clearing house in London handles only a small fraction of the cheques cashed in the Province, the proportion has increased slightly from 2.8 per cent. in 1939 to 3.3 per cent. in 1953. The total value of cheques cashed in that city for the latter year was \$1,973 million. The financial institutions include thirty-one branches of the chartered banks and Province of Ontario Savings Offices. The head office of Canada's second largest insurance company and the head office of the second largest loan company are also located in London.

#### Mining

Mineral production in the Upper Thames Region is of comparatively minor importance. Producing no metals whatsoever, the Region accounted, in 1952, for only slightly more than one per cent. of mineral production in Ontario. Similarly, its shares of non-metallic and clay products production in the Province were roughly one per cent of total value in each case. In the class known as structural materials, however, the Region was responsible for about one-twelfth of the Provincial total (in terms of gross value). This was largely a result of Oxford County's production of quicklime valued in 1952 at \$2,697,933, or approximately one-half of Ontario's output of this substance. Limestone from quarries near Beachville in Oxford County, is used as a flux by the steel industry in Hamilton.

#### THE BORDER REGION

#### Introduction

The Border Region is made up of the counties of Essex and Kent. It is bounded on the north by Lambton County, on the west by Lake St. Clair and the Detroit River, on the south by Lake Erie and on the east by Elgin County. Lying in the same latitude as California, it is the most southerly part of Canada.

Historically, this is one of the oldest regions in Ontario, having been settled early in the eighteenth century by French families from the trading post at Detroit. The French settlement, the far-flung parish of l'Assomption, extended north from the Canard River to the Thames. Under British rule, Detroit continued to be the metropolis of the region although, as early as 1783, some far-sighted loyalists started a settlement at the mouth of the Detroit River on land purchased from the Indians. Title to this land was later confirmed by the government. When Detroit was relinquished in 1796, a new town was founded on the Canadian shore of the river and named Sandwich.

Early in the nineteenth century, the 950 acre Baldoon settlement on the St. Clair River opposite Walpole Island was started by Alexander Macdonnell as agent for the Earl of Selkirk. When the project failed, Selkirk and Macdonnell transferred their activities to the west where they founded the Red River colony. Another, more successful, colonizer was Thomas Talbot who had been an aide of Governor Simcoe. He settled pioneers on fifty acre farms along the Talbot Road as it was being built westward toward Essex County.

The friendly spirit which had marked relations on both sides of the border ended with the outbreak of hostilities in 1812. Early in the campaign, an invasion by Americans under General Hull was repulsed at River Canard and shortly afterward Detroit surrendered to General Brock. Proctor, who succeeded Brock in command, did not continue his policy. Instead, he blew up the forts at Amherstburg and Detroit as untenable and retreated eastward. The Indians who accompanied him in the retreat made a stand at Moraviantown, where their chief, Tecumseh, was killed. The Americans then occupied Amherstburg, rebuilt the fort and held it until the end of the war.

For the next decade or more, the most substantial and lucrative industry in the region was the fur trade, with its centre at Moy Hall, although agriculture was carried on in a large way on some of the big farms near Amherstburg where one proprietor owned no less than sixty slaves whom he had brought into the country in 1784. But after the amalgamation of the Northwest and Hudson Bay Companies, the fur trade gradually declined as the land was cleared and the local Indians were absorbed into the white population.

In 1831 bog iron was discovered in Gosfield Township. The necessary limestone, sand and clay were available on the spot, and fuel for the blast furnaces and foundry was obtained by clearing the wood lots of neighbouring farmers in return for the charcoal so produced. The industry, which employed between sixty and seventy men, flourished for a decade or more, its finished products being shipped out from the nearby port of Union. By the time the Great Western Railway reached Windsor, in 1854, the company had ceased operation.

#### Population

The Border Region had an estimated population of 309,000 in 1953, 6.3 per cent. of the Ontario total. The census figure in 1951 was 296,278, an increase of 23.2 per cent. over 1941, which exceeds the provincial increase of 21.4 per cent. over the same period. The urban-rural structure of the two counties which comprise the Border Region is not similar. For every person classed as rural in Essex there are four in urban centres, but in Kent the groups are evenly divided. In the case of Essex, Greater Windsor accounts for 157,672 of the total (177,838) urban figure.

A study of the racial origins of the present population reflects the early French settlements, the Loyalist (British and German) settlements and the subsequent British, and in recent times other European immigration. Fifty-six per cent. of the population is of British origin, 19 per cent. French and 4 per cent. German.

The remainder (21 per cent.) is made up of smaller groups.

## Transportation

Transportation facilities in the Region include five railroads together with efficient railway tunnel and car ferry service between Windsor and Detroit. Six major transport companies operate out of Windsor, in addition to a number of smaller concerns. A total road mileage of 3,138 includes parts of two of the Province's leading highways (Nos. 2 and 3) which have their terminals within the Region. The number of persons per motor vehicle averages 3.9. The area is also served by Trans-Canada Airlines with connections to all major American lines via Detroit. Navigation for the Windsor area begins as early as the middle of April and closes at the end of November. The Border Region has ten ports which handled 2,256 vessels with a registered tonnage of 2.2 million in 1951, fifth in volume in the Province. The port of Windsor leads the Region in terms of tonnage and number of vessels arriving. Other important ports include Amherstburg, Walker-ville and Leamington.

Geographic location on the busiest inland waterway in the world, at the focal point of land and air routes, and in the heart of the North American manufacturing area has greatly stimulated the growth of manufacturing, specialized farming and tourism in the Border Region. Such necessary industrial components as iron ore from Minnesota, coal from Pennsylvania, water power and manpower are all readily available.

#### Manufacturing

The importance of manufacturing to the economy of the Border Region is reflected in the high proportion of the total labour force, forty-three per cent. in 1951, which is directly engaged in manufacturing. In 1953 there were an estimated 49,400 employees in manufacturing industries. Many other employees not directly involved provide services such as retailing which in turn are dependent on manufacturing. The automobile industry, established in Windsor in 1904, has been the dominant component in the industrial structure despite the numerous industries represented in the Region.

The Border Region produces eleven per cent. of the gross value of goods made in the Province. Since 1939 employment has more than doubled and payrolls have increased sixfold, a larger increment than that of Toronto or Hamilton, the two largest manufacturing centres in Ontario. Average wages and salaries are among the highest in Ontario, exceeded only by the St. Clair River Region in the southern part of the Province.

Windsor, the largest manufacturing centre and the industrial hub of the whole region ranks as Canada's fourth manufacturing city on the basis of gross value of production which exceeded half a billion dollars in 1950. Prior to becoming an important industrial centre Windsor was a railway terminal and port of entry, a factor which has subsequently been important in the development of industry. The five railroads operating out of Windsor, together with six provincial highways assure adequate transportation for industry. The busy Detroit River means cheap transportation of bulky raw materials such as coal. But the most important factor has been the proximity of Detroit, the heart of the United States automotive industry, which has led to a parallel development in Windsor. There has been a trend of late towards decentralization of the automotive industry on both sides of the border, evidenced in Canada by the newly-constructed automotive assembly plant at Oakville, but considering the industry's investment in buildings and machinery at Windsor, the city will remain an important automotive centre. As the city expands, the industrial base will become broader, the products more diversified, and the local economy less dependent on the fortunes of a singel industry. Other important industries in Windsor include distilleries, breweries, chemical works, and a number of plants supplying parts to the automotive industry. Four Canadian drug companies have head offices in Windsor. In all there were 280 manufacturing establishments in 1950 but the number has increased since then. In 1951 seven new plants located in greater Windsor and in 1952 twelve more were established. One notable feature is the proportion of wholly or partially American-owned companies which now comprise over half of Windsor's manufacturing firms, a result of the proximity of Windsor to the injustrial centres of mid-western United States.

Other important centres, beyond the vicinity of Windsor, are Chatham, Wallaceburg and Leamington. Chatham, which ranks as the Region's second manufacturing centre produced goods valued at \$68 million in 1950. Manufactures include automotive products, textiles, clothing and food products. Two new companies located in Chatham during 1952, a steel products and plastics products company. Wallaceburg, one of the fastest growing towns in the Region with an intercensal population increase of 54 per cent., is noted for metal and glass products. In 1952 another steel products plant was established in the town. Leamington, the centre of the fertile farmland of the Region, has a large canning factory which employs up to 3,000 in peak season. Two tobacco firms are also represented.

In summary, the Border Region with its spectacular rate of industrial growth since 1939, is one of the most promising major industrial areas in Canada. The new industries established in 1953, twelve in total, mean a continuation of this trend and a wider diversity of manufactured products. However, chronic fluctuations of employment in the automotive industry, together with seasonal variations in the canning industry has meant that industrial employees are subject to relatively severe fluctuations in employment. A three year study of average unemployment shows this variation to be between three and seven per cent. of the total labour force.

#### Agriculture

The Border Region, with seven per cent. of the occupied farms in Ontario, accounted for eight per cent. of the net farm income in 1950. Eighty-nine per cent. of the total area is in occupied farm land, and the same proportion of this is improved land. Profitable farming operations are dependent, to an important degree, upon the farmer's skill in adapting his techniques to the physical characteristics of the land. The operators of 5,320 occupied farms in Essex and 5,300 in Kent have been successful in doing this. When it is realized that heavy textured, poorly-drained soils constitute about two-thirds of the area of Essex County and that only slightly over five per cent. of it consists of well-drained, light to medium textured soils, the necessity for creative farming is evident. Kent County has a similar problem.

While the climate imposes a definite limitation for some purposes, it is one of the farmer's chief allies. This Region is the most temperate in Ontario. Point Pelee, in particular, has a normal January temperature of 25°F. and a July temperature of 71°F, an annual snowfall of 40 inches and an annual rainfall of 29 inches, the latter being the lowest in the Province.

Conservation has become the by-word in this region as a means of preserving and developing the productivity of the soil. Since so much of the land suffers from relatively poor drainage, tile drains have been laid and improvement in fertility noted as a result.

Climatic, geographic, and soil conditions have laid the basis for the profitable growing of early vegetables, particularly in the southern part of the Region. The fluctuations of daily market prices has led to intensive crop specialization. Cash crops are important in value and acreage. The Leamington district, because of its extreme southerly location and other favourable factors, has the earliest and longest growing season in the Province (216 days). Consequently, its lettuce, radishes, cucumbers, cabbages, tomatoes, cauliflowers, spanish onions, and peppers reach the urban markets from one to several weeks earlier than from any other area. Other speciality crops are peaches, sweet and sour cherries, plums, pears, carnations and chrysanthemums. The Erieau Marsh located on the shores of Lake Erie in Kent County is noted for specialization in the production of onions. In 1952, 34 per cent. of the onions, 69 per cent. of the cantaloupes, 50 per cent. of the tomatoes and 20 per cent. of the asparagus grown in Ontario came from the Border Region. An investment of over \$11 million in greenhouse production in Essex County alone has given impetus to this thriving cash crop sector of the economy.

Sweet potatoes, grown in the Harrow vicinity of Essex County, are a crop unique in Canada. The growers surrounding Leamington and on the Marsh lands down to Point Pelee National Park produce more than 90 per cent. of the onions (grown in sets) in Eastern Canada.

Soy beans provide one example of adaptation of the crop to changing demands. Soy beans became popular in Ontario during the second World War, and subsequently spread east and north out of Kent and Essex, following the clay belt. Yet in 1953, the Border Region still accounted for 70 per cent. of Ontario's soy bean output, valued at \$7.5 million. This area grew 53 per cent. of the Province's sugar beets in 1951, valued at \$2.7 million. The sugar refineries at Chatham and Wallaceburg processed about 100 million pounds of beetroot sugar at a value of approximately \$10 million in 1950.

This Region also produced 96 per cent. of the Province's burley leaf tobacco, valued at \$1.7 million. Tobacco processing and packing plants are situated at Chatham, Kingsville and Leamington. Their output of burley leaf products was valued at over \$5 million in 1950, and represented all of Canadian burley leaf manufactures.

ESTIMATED AREA, PRODUCTION AND VALUE OF COMMERCIAL FRUIT AND VEGETABLE CROPS IN THE BORDER REGION - 1952

Crop Cantaloupe Tomatoes Asparagus Cabbage Onions Carrots Cauliflower Celery	Acreage Acres 570 20,030 610 555 1,425 235 192 87	Production ,000 200 bu. 5,404 bu. 980 lbs. 8 tons 15 tons 3 tons 60 doz. 40 crates	Value (1) \$,000 330 7,026 103 314 1,339 120 83 78	Border Region as a % of Ontario % 69.4 49.9 20.2 24.9 34.0 8.7 14.8 13.0
Lettuce	165	181 doz.	127	5.9

(1) Calculated at average yearly prices received by growers for crops grown in Ontario, west of Toronto, 1952.

Source of of original figures: Ontario Department of Agriculture

FARM VALUE OF		AGRICULTURAL E		REGION
	(in	thousands of do	ollars)	Region as a %
	Essex	Kent	Region	of Province
Field Crops - 1953 Wheat Oats Corn for husking Potatoes Soy beans	2,825.2 778.2 5,058.3 1,206.5 3,515.5	4,491.2 1,218.3 10,342.8 299.9 4,020.6 1,589.0	7,316.4 1,996.5 15,401.1 1,506.4 7,536.1 3,026.0	18.7 4.1 55.5 11.8 69.8 3.2
Hay Livestock on hand-1953 Cattle Swine	1,437.0 4,875.6 756.4	7,643.6 2,185.5	. 12,519.2	3.1 6.4
Poultry on hand - 1952 Total poultry on hand Hens & Chickens	604.2 467.7	831.5 773.3	1,435.7 1,241.0	6.1 6.0

Source: Ontario Department of Agriculture

#### Mining

While mineral production in the Border Region forms a very small part of the total production of the area, the contribution of certain mineral products to the Provincial total is significant. Natural gas from both Essex and Kent, leads the list in dollar value, comprising approximately one-third of Ontario's total production. Almost three-quarters of Ontario's salt production with a value in 1952 of \$2,042,504 comes from Essex County. The regional production is more than half of the total volume of salt produced in the whole of Canada. Structural materials (sand, gravel, etc.) were produced in 1952 with a value of over \$2 million, largely in Essex. Clay products (brick, tile, etc.) were produced mostly in Kent. Crude petroleum production in Kent County, a declining industry, was valued at only \$49,904 in 1952.

#### THE ST. CLAIR RIVER REGION

### Introduction

The St. Clair River Region, comprising Lambton County, is situated along the south-eastern shore of Lake Huron, and is bounded on the east by the county of Middlesex, on the south by the county of Kent and on the west by the St. Clair River. The historic background and geographic location of Lambton County, and its main urban centre, Sarnia, have played an important role in their growth from a primarily agricultural and lumbering area to a potentially great manufacturing district.

The greatest single decade of population growth in the history of the County (1851-61) was largely a result of the railroad and oil developments. During this period population more than doubled, increasing 130.4 per cent. to 24,916 persons. Land development had matured by the turn of the century with 660,000 acres out of a total of 719,360 acres occupied, and the population growth levelled off until the great industrial expansion during the years of the second world war. Industrial development in Sarnia (city proper) was reflected in its population growth (1901 - 8,176; 1941 - 18,734; 1951 - 34,697). With a percentage increase in population of 85.2 per cent. from 1941 to 1951, Sarnia is one of the fastest growing cities in Canada. The population of Greater Sarnia reached 41,303 persons (1951 census) or 55.1 per cent. of the Lambton total. The changing urban-rural picture in the County is a sympton of the trend toward industrialization: 1941 - 25,544 urban and 31,381 rural population; 1951 - 42,631 urban and 32,329 rural. The total population of the Region reached an estimated 82,000 in 1953.

	POPULATION GROWTH IN SAF	RNIA &	LAMBTON	COUNTY	
				Lambton	
Year	Sarnia			County	
1953	38,000	(1)		82,000	(1)
1951	34,697			74,960	
1941	18,734			56,925	
1931	18,191			54,674	
1921	14,877			52,879	
1911	9,947			51,332	
1901	8,176			56,642	
1891	6,692			58,810	
1881	3,874			52,034	
1871	2,929			38,897	
1861	800	(1)		24,916	

(1) Estimate
Source: Dominion Bureau of Statistics

Historically, the first major economic development occured in this area after 1858-60, when the Great Western Railroad had completed its line from London to Sarnia and the Grand Trunk Railroad reached Point Edward. The presence of the St. Clair water route, the vast stands of hardwood timber, and the demand for cleared land very early had created a great but transient industry - lumbering. The coming of the railroads made active and profitable thousands of acres of farmland. In 1851, 34,947 acres were under cultivation and by 1871 this figure had increased to 131,514 acres under crop and 6,030 devoted to gardens and orchards.

The existence of oil had been noted as early as 1830, but it was not until 1862, when the Shaw well came in at Petrolia, that the boom actually appeared. In 1851 oil had been drilled at Oil Springs, giving the area strong claim to having the first oil well drilled on the continent, and the first refinery in Canada began operations in 1858. By 1865, Petrolia had succeeded Oil Springs as the centre of oil development. In the course of years, the demand for oil grew, new western markets developed, and simultaneously Canadian production declined; thus, Sarnia became the logical centre of importation of American crude oil and in 1897 Imperial Oil transferred its activities to Sarnia. This historical background is important today in that it was indirectly responsible for the location of the Imperial Oil Refinery in Lambton County and this in turn provided the basis for the petro-chemical development of the past decade.

built under the St. Clair River. This made Sarnia the centre for two great rail-roads (Canadian National and the Pere Marquette which connects with the C.P.R. at Chatnam) and a leading port of entry from the United States. The St. Clair River Landles more shipping in a six-month period than the Suez, Kiel and Panama Canals combined in twelve months. The navigation season lasts from the beginning of April to the micole of December, and Sarnia has a waterfront with 6,700 feet of berthing facilities (2,800 feet in winter), nandling annually approximately 1,250 ships with registered townage of 2,000,000. Sarnia is centrally located for obtaining essential manufacturing components such as construction materials, hydrocarbons, water-power, coal, etc. Within a radius of one hundred miles of Sarnia live 750,000 persons or 16.3 per cent. of the Province's population (1951). This radius includes six cities and eight counties.

#### Manufacturing

Several important factors have contributed to the growth of manufacturing in Lambton County. Cheap transportation facilities, proximity to large markets, and availability of water and salt have been of great importance. The biggest single factor, however, was probably the birth of the oil industry in Lambton County in the 1850's. Although today of minor significance, crude petroleum mining in the past provided the incentive for the location of refining operations in Lambton County which have persisted and greatly expanded until today they furnish not only a very considerable volume of refined oil, but also provide the basis for Sarnia's vast petro -chemical industry. At the turn of the century, kerosene was, to all intents and purposes, the only major item made from petroleum; today this raw material is employed in the manufacture of more than 600 different products.

While Sarnia's gross value of manufacturing production, itself, is not a very large component of the Provincial total, it represents some very important items. Fuels, industrial oils and greases, synthetic rubber, solvents, and asphalt by no means exhaust the list but serve to indicate the diversity of products emanating from Sarnia's famed "Chemical Valley". Among the chemicals of which the city is the only Canadian manufacturer, are carbon tetrachloride (an important industrial solvent) and glycol (used in making antifreeze, expolsives, cellophane, etc.), with the first plant in Canada for making carbon black (used in the rubber industry) only recently completed.

The oil refining industry in Lambton County has had an impressive history of growth from the 1860's to the present, with one company exhibiting a close integration with the welfare of the community. Founded in 1880 and originally concentrating its activities at Petrolia, Imperial Oil Limited moved to Sarnia in 1897 where it has operated ever since. Until September, 1951, its refinery was the largest in the British Commonwealth and has a capacity of 71,000 barrels a day. Average production of this refinery in 1951 was about 55,000 barrels a day.

In addition to Imperial Oil, Canadian Oil Companies have built a refinery with an annual capacity of 22,000 barrels a day, and the Sun Oil Company has recently completed a new refinery which raises the total capacity of the Sarnia area to more than 100,000 barrels a day.

Of considerable importance to the oil refining industry was the recent completion of the Interprovincial pipe-line, tapping the petroleum resources of Alberta and providing for greatly reduced transportation costs. The pipe-line through south-western Ontario linking Sarnia with London, Hamilton and Toronto is now completed. This line has an initial capacity of 39,000 barrels a lay and supplies the heavily populated and highly industrialized areas of southern Ontario with gasoline, diesel oil, stove oil and furnace fuels.

The petro-chemical industry is of comparatively recent origin. In 1942, under the impetus of a war-time scarcity of rubber, the publicly-owned Polymer Corporation located at Sarnia where it had easy access to necessary hydrocarbons produced by Imperial Oil Ltd. Dow Chemical of Canada Ltd. made its appearance at that produced by Imperial Oil Ltd. Dow Chemical of Canada Ltd. made its appearance at that produced by Imperial Oil Ltd. Dow Chemical of Canada Ltd. made its appearance at that produced to operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer. These three time too, operating a styrene manomer plant in conjunction with Folymer.

the industry is illustrated when it is considered that 90 per cent. of the rubberconsuming capacity of Canada lies within a 200 mile radius of Sarnia and that coal, which Polymer consumes at the rate of 350,000 tons annually, can easily be shipped from Northern Ohio lake ports. A decision to proceed with the proposed St.Lawrence Seaway project would give further significance to the area and possibly pave the way for a large scale export programme.

Other manufacturing industries of importance in the St. Clair River Region include automotive equipment, (Point Edward), glass (Sarnia), oil well supplies (Petrolia), wire manufacturing (Watford), basket making (Forest), and lumber processing (Thedford).

A comparison of figures serves to emphasize the rapid rate of industrial expansion experienced by Sarnia. In 1939 the gross value of manufacturing production in the city was \$26.6 million. By 1950 it had multiplied itself six and one half times and stood at \$169.8 million. This figure was the fourth largest in Ontario and eighth in Canada. Manufacturing employment statistics for 1950 give a total for the city of 7,512 employees with an aggregate payroll of \$21.2 million.

From the standpoint of number of employees and source of income, manufacturing is the most important economic activity within the Region. Approximately 34.6 per cent. of the labour force was engaged in manufacturing, 19.9 per cent. in agriculture and 14.3 per cent. in service establishments. There were an estimated 9,500 employees in manufacturing in 1953. Average wages were \$71.96 during this period, the second highest in the Province, and exceeded only by the Nickel Range Region.

New enterprises in the County include additions to oil refining and building supplies, with expansion programmes planned or underway in the oil, chemical, rubber, glass, metal stampings, and aluminum products industries. The first Canadian producer of carbon black only recently commenced operations: Indicative of the recent trend of expansion is the fact that in Sarnia, of a total of forty-one manufacturing firms reported as at the end of 1952, twenty-five list commencement-of-operations dates since 1942.

#### Agriculture

Lambton County today is noted for its great diversity of crops, including honey, peppermint, celery, sugar beets, and tobacco. The basis for these farming operations is found in the wide climatic range, soil conditions and geographic location. Eighty-five per cent., or 613,000 acres, of the total area is occupied farm land, and 78 per cent. of this is improved. The estimated average income per occupied farm, \$3,200 (1950), is higher than the Provincial average.

In general, the County is a level plain, consisting mainly of alluvial clay loams overlain in areas by sandy loams and gravel ridge deposits. It is crossed by streams affording natural outlets for drainage. Other favourable conditions include the climate modifying effect of Lake Huron to the north-west and the southerly latitude. The growing season averages 204 days, beginning about April 14. The County has a frost-free period of 153 days, a normal July temperature of 69°F, annual snowfall of 61" and rainfall of 33.8".

The most important single factor responsible for the County's agricultural position was the value of field crops, in 1952, amounting to a farm value of \$12.5 million. These crops are grown mainly in the middle and southern areas of the County. From the "pioneer" staple grains, the farmer turned his energies to such specialized interests as gruit-growing and livestock raising. The short winter helps to provide green pasture for feeding stock from early May to early December, while clay loams ensure heavy yields of hay and grain, owing to the nitrogen and potash in the soil. Corn and alfalfa yield good crops of fodder, as well as seed. Dairying, centred around Sarnia, and hog-raising, have grown in importance.

As early as 1871, there were 6,030 acres devoted to gardens and orchards, especially to the hardier types of fruit. Today, apples, pears, and plums grow readily on the clay loams, while the gravel ridges provide ideal soil for peaches. Commercial development of the fruit-growing industry is mainly in the northern part of the County, around Sarnia, Forest, Thedford, Arkona and Wyoming. The Sarnia

area, particularly, is well situated for the production of early apples for distribution on the Western Canadian market. Late apple varieties include Wealthy, Spy, Delicious and McIntosh. In the northern and eastern sections of the County, berries have been a staple crop. Berry farms around Arkona, Thedford, Forest and Sarnia yeild remarkable crops for small acreage.

Early in its history, Lambton County became known as a year-round sanctuary for wild turkeys. By 1951, its 241 turkey farms led the Province in raising over 66,000 turkeys. In 1952, there were 68,600 turkeys on hand, valued at \$253,000, 11 per cent. of the value for the Province.

The sugar beet has become an important cash crop, covering 4,822 acres, chiefly in the Sarnia area, in 1951. Sugar refineries were early located in Michigan, and later at Wallaceburg and Chatham. Lambton's honey production was valued at over \$8 million in 1950, 40 per cent. of the provincial value of production. Mushrooms, rarely cultivated out-of-doors except in Europe, have been found growing wild near Petrolia in sufficient quantities for commercial shipments. Bean growing has spread from Kent to Lambton County:

The raising of flax, tomatoes, beets, carrots and celery, and in some areas, tobacco, further indicate the trend to diversified farming.

FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS - ST. CLAIR REGION (in thousands of dollars)

	(In chongaine or dorrer	10)	,
Products	Region		Region as a % of Province
Field Crops - 1953 Wheat Oats Corn for husking Soy beans Corn for fodder Hay	2,261.0 1,303.0 3,426.8 924.3 636.8 2,474.0	ę	5.8 2.7 12.3 8.6 6.0 2.6
Livestock on Hand - 1953 Cattle Swine Sheep and Lambs	12,399.0 1,302.3 631.5	,	3.1 2.8 6.4
Poultry on hand - 1952 Total poultry on hand Hens & Chickens Turkeys	1,287.6 995.2 253.1	(	5.6 4.8 11.1

Source: Ontario Department of Agriculture

#### Mining

Of a total value of mineral production of \$4,943,104 in Lambton County in 1952, natural gas was reponsible for 65.5 per cent., salt for 19.1 per cent., petroleum for 11.0 per cent., with structural materials and clay products making up the balance. Although the total value of minerals is quite small, the Region's production of non-metallics is exceeded only by the Border Region.

About one-third of Ontario's natural gas came from this Region, slightly more than from the Essex and Kent fields. 'The second most important mineral (in terms of dollar value) was salt. There were 146,187 tons of salt mined, worth \$946,233 in 1952, the second highest in the Province. Petroleum production was virtually the same as in 1951 (162,908 barrels worth \$544,732 in 1952) but showed a great decrease from 1950. Oil Springs, it is interesting to note, is still a producing area after about a century of operation.

#### THE UPPER GRAND RIVER REGION

#### Introduction

The Upper Grand River Region of Ontario comprises the counties of Perth, Waterloo and Wellington in the heart of south-western Ontario. This is the only Region in the Province which is not partially bordered by water. It also has one of the highest elevations above sea-level of any Region in Southern Ontario.

The first settlers in Waterloo County were Mennonites who left Pennsylvania in 1799. They spent the winter in what is now Lincoln County and in the spring of 1800 followed the Indian trail to Brantford and the Grand River north to the original settlement on the east bank of the river, four miles south of the present site of Kitchener. Thirteen years before, the first immigrants from Pennsylvania had come to Upper Canada and settled in Lincoln County. These settlers traced their ancestry largely to Germany and Holland. After the American Revolutionary War, these people chose to remain under British rule and have been closely indentified with the United Empire Loyalists.

The cities of this Region have developed a diversity of industries as a consequence of the particular skills of the early settlers, favourable location with respect to the rest of the Province and the rich agricultural hinterland. There is no noticeable dependence of any city on one dominating industry, a fact which has gained for the Region a reputation for economic stability. As is true of many cities in Ontario, postwar industrial expansion in the urban centres of the Region has been considerable. Many new industries are locating here and urban populations are overflowing into the neighboring townships.

From 1816, when Abraham Erb established the Region's first industry in the form of a grist-mill, until the present time, the industrial growth of the area has been enormous. During the past two years alone, twenty-four new industries located in the Upper Grand River Region. One-half of these settled in the city of Guelph and five in Stratford. During 1951, forty-three major expansions of industries were recorded, thirteen of which occurred in Guelph, eight in both Kitchener and Stratford and seven in Galt.

But it is not in the field of industry alone that the Region lays claim to fame. The presence of the head offices of six insurance companies in the city of Waterloo, makes this city one of Canada's leading financial centres and lends an unusual degree of stability to the whole area. Total assets of these six companies amounted to almost \$500,000,000 in 1950. Many smaller insurance companies are located in this Region, one of which, the Gore District Mutual Fire Insurance Company of Galt, has been in existance for 114 years.

The Upper Grand River Region's contribution to the provincial economy is, thus, a many-sided one. Great insurance companies have taken their place beside agriculture and industry adding to the major contributions made by the area to the provincial and national economy. These developments have been throughout their history, a reflection of the thrift, industry and initiative of the citizens of this Region.

#### Population

In 1953 the population of the Upper Grand River Region was an estimated 259,000, the fifth largest in the Province. The population at the time of the census in 1951 was 245,637, an increase of 18.2 per cent. over the 1941 figure. More than half of the Region's population lives in Waterloo County, the fastest growing component of the area. The remainder is fairly evenly divided between Perth and Wellington counties which recorded intercensal population increases of 5.8 per cent. and 12.6 per cent. respectively. The age distribution of the population of the Region follows closely the provincial pattern except that Perth County has an above-average number of persons in the "sixty-five years and over" category. Two-thirds of the Region's population are classified as urban compared with 70.7 per cent. in the Province as a whole. Fifty-eight per cent. of the Region's inhabitants trace their origin to the British Isles, this proportion varying from 78.6 per cent. in Wellington County to 42 per cent. in Waterloo. The second largest group is of German ancestry, the proportion ranging from 45.3 per cent. of the total in Waterloo

to 9.4 per cent. in Wellington.

The Region contains five incorporated cities, the largest number in any region of the Province. These centres, together with the estimated 1953 population figures, are as follows: Kitchener (48,500) Guelph (29,800), Galt (21,300), Stratford (19,300) and Waterloo (13,100). Kitchener, Waterloo and Galt have recorded intercensal population increases of 26,33 and 25 per cent. respectively, while Guelph and Stratford increased by 18 and 10 per cent. There are six other municipalities with populations in excess of 2,500.

The valley of the Upper Grand River provides a fertile hinterland to the Region's manufacturing centres, and has been developed extensively for live-stock farming. Ninety-three per cent. of the total area is classified as occupied farm land, a larger proportion than in any other region. Eighty-two per cent. of the available farm land has been improved, and in Perth County, the proportion of improved acreage to the total farm area is 88 per cent.

According to the 1951 Census, approximately 15 per cent. of the labour force is engaged in agriculture, a proportion second only to manufacturing in the major occupation groups. In Perth, the number of people engaged in agriculture exceeds those in the manufacturing industries. The net farm income in the Region in 1949 was estimated at forty-four million dollars, on a per capita basis the third largest in the Province. These figures suggest the relative importance of agriculture in the economy of the Region in terms of employment and net income.

The climate of this area is moderate, with a mean July temperature of 68°F and January temperature of 20°F. The Region is slightly higher than most in Ontario and this is largely responsible for the above-average rain and snowfall. The average precipitation is approximately thirty-five inches annually.

The dominant soil characteristics vary considerably in different sections of the Region. In Perth County, clay till plains are overlaid with silt loam. Poor drainage in the northern sections of the County often restricts the use of the soil to pasture. The farm land in Waterloo County, on the other hand, is characterized by well-drained, sandy soil. Field crops are grown extensively on the slopes of the Waterloo Hills, which comprise most of the farm area in the County, and the proportion of the farm area used for field crops in 1952 was 65 per cent., the highest of the three counties. Only 11 per cent. of the land was used for pasture. This emphasis on field crops has tended to increase erosion on the sandy slopes, but the effects of soil depletion are partially offset by the use of manure.

The soils in Wellington County vary in texture depending on their position on the hillsides which are characteristic of all but the northern sections of the County. The Guelph loam, on which most of the farmland of the Ontario Agricultural College is located, is noted for its good drainage and reliability. The heavy soils in the valleys are poorly drained and used solely for pasture.

Livestock farming is paramount throughout the Region. Cash income from the sale of livestock accounts for approximately 66 per cent. of the total farm income while dairy products account for 18 per cent., eggs, 7 per cent., and field crops, 7 per cent. About 2 per cent. of the total farm income is received from miscellaneous sources including honey and fruit.

Hogs are raised on a large scale in all three counties. They account for about forty per cent. of the total farm cash income in the Region. Perth County ranked first in the Province in 1952 in the value of swine on hand, and the Region ranked second only to the Biue Water Region. The emphasic on swine raising has ranked second only to the Biue Water Region. The emphasic on swine raising has ranked second only to the Biue Water Region. The emphasic on swine raising has real growing large quantities of cereals and field roots for feed. In 1952, 10 per cent. of all field crops, and 25 per cent. of mixed grains in the Province were grown in the Upper Grand River Region.

Cattle, valued at fifty million dollars in 1952, represent the largest investment in livestock. Cattle sold for beef account for about twenty per cent. of the farm cash income--half as much as swine. Cattle are raised for beef in the three counties, particularly in Wellington, where in 1951, 64 per cent. of the cattle were kept mainly for beef.

Perth leads the Region in cash income from dairying. This County was Ontario's largest producer of creamery butter in 1953, with 6,617 thousand pounds.

Poultry raising is characteristic of farming in the Upper Grand Region, and it accounts for a relatively high proportion of farm cash income compared with other regions in the Province. The Region ranked second in the farm value of hens and chickens on hand in 1952. Eggs account for seven per cent. and poultry sold for meat for six per cent. of the farm cash income.

Field crops are grown principally for feed rather than as cash crops, but some vegetables are sold, notably potatoes and turnips. Potatoes are grown principally in Wellington County while turnips are characteristic of all three counties. Over 30 per cent. of the flax grown in the Province was grown in this Region in 1952, principally in Wellington and Perth.

In summary, the importance of agriculture in the Region is reflected in the high proportion of improved farm land to the total area and in the number of people engaged in farming relative to the total labour force. The favourable soil, the climate, and the industry of the people have developed the Region into one of Ontario's leading livestock areas. The establishment of the Ontario Agricultural College in the Region suggests the fertility and reliability of the soil. Livestock, particularly swine raising, is the principal source of farm income, followed by dairying and poultry raising. Field crops are grown chiefly for feed rather than as cash crops, with a few exceptions, which include potatoes and flax.

# DAIRY FACTORIES IN THE UPPER GRAND RIVER REGION - 1951 -

County		& CHEESE TORIES No.of Employees	Creamery Butter	VALUE OF Cheddar Cheese \$'000	Other (1)	Total \$ '000
Perth Waterloo Wellington	20 10 12	160 182 237	3,112.0 1,728.9 2,755.3	1,082.4 99.6 78.5	1,106.5 1,857.4 1,659.4	5,301.1 3,686.0 4,493.1
REGION	42	579	7,596.4	1,260.5	4,623.3	13,480.2
	-					
Region as a % of Province	71	7.4	18.0	5.6	6.8	10.1

(1) includes fluid milk and cream and ice cream sold Source: Dominion Bureau of Statistics

FARM VALUE OF SELECT	PED AGRICUI	TURAL PRODUCT	S - UPPER GRA	ND RIVER	REGION
	Region as a				
Products	Perth	Waterloo	Wellington	Region	% of Ontario
Field Crops - 1953 Wheat Oats Barley Mixed Grains Corn for fodder Potatoes Field Roots Hay	899.6 1,181.4 549.0 3,493.2 376.1 113.1 199.0 2,748.0	1,493.6 1,446.3 144.2 1,867.0 409.7 284.5 243.6 1,745.0	3,314.7 306.3 325.4		8.2 8.2 13.4 22.6 10.3 5.7 23.2 7.8
Livestock on hand - 1955 Cattle Swine Sheep & lambs Poultry on hand - 1952 Total poultry on hand Hens & Chickens Source: Ontario Department	17,920.0 3,379.7 150.7 1,192.3 1,136.5	872.8	1,022.7	43,301.5 8,570.2 714.6 3,227.3 2,990.5	10.9 18.6 7.2 13.7 14.4

#### Manufacturing

The number of people employed in manufacturing in the Upper Grand River Region exceeds those i. all other industries. Forty-four per cent. of the labour force was engaged in manufacturing, 15.8 per cent. in agriculture and 14.0 per cent. in service establishments. Approximately 45,600 were employed in manufacturing industries in 1953, the fourth largest number in any region. Although the Region has not been one of the fastest growing industrial areas, the progress has been steady and the fluctuations in employment less marked than in the Niagara and Border Regions. The establishment of nine new plants in 1953 and thirteen in 1952 suggests that the relative importance of the Region as a manufacturing centre will be maintained. The gross value of manufacturing production exceeded \$409 million in 1950, six per cent. of the provincial total.

The absence of lake ports appears to have determined in part the character of manufacturing in the Upper Grand Valley. Excellent rail and road transportation facilities from the cities of the area, which are located between the markets in Windsor, London, Hamilton and Toronto, favour light manufacturing. Cheap hydro-electricity provides power for light industry. The prosperous farms in the Valley, specializing in livestock, supply the meat-packing plants and the tanneries.

Kitchener is the largest manufacturing centre in the Upper Grand Region. The tires, beverages, leather goods and furniture made there are known throughout the country. Manufacturing industries in Kitchener and its adjacent twin, Waterloo, employ forty per cent. of the workers engaged in manufacturing in the Region, and the value of the manufactured products exceeds forty-five per cent. of the total in the Upper Grand Valley. Kitchener ranks tenth in Canada on the basis of gross value of manufacturing production.

Kitchener and Waterloo are located in Waterloo County on the Canadian National and Canadian Pacific Railways, seventy miles west of Toronto. The excellent rail and highway facilities to Toronto, Hamilton and Windsor and the industrial markets in those centres have been important factors in the growth of the Twin Cities. The fertile hinterland where livestock is the principal product has provided the base for a large meat-packing industry. Valuable also, have been the techniques and the industry of the early German pioneers. In 1860, for example, Waterloo had two flour mills, two foundries, a woollen mill and a tannery.

The rubber products industry in Kitchener, with five companies, is the largest employer and the city's most important industry. The food products industry, which ranks second, includes various companies processing meat, two breweries, and one distillery. Three tanneries and ten shoe companies are located in the two cities. The furniture industry includes nineteen companies in the Twin Cities and several others throughout the smaller centres in the County of Waterloo.

Since the war, both the food and beverage and the furniture industries have shown remarkable increases in the number of persons employed - over double in each instance. The food and beverage industry has been characterized by steady growth with seasonal variations. The rubber products industry is closely tied to growth endouble industrial market. Furniture sales rose sharply to a peak in early the automobile industrial market. Furniture sales rose sharply to a peak in early then decreased throughout the year, partially as a result of consumer credit restrictions. Employment in the industry has increased during 1992. Employment in the leather products industry, on the other hand, has remained almost stationary over the last five years.

In the main the broad industrial base of diversified industries has resulted in a steady increase in employment paralleling but below that recorded in the Province as a whole.

Guelph is situated in Wellington County forty-five miles west of Toronto. The city is served by the Canadian National Railways, the Canadian Pacific Railway via Guelph Junction, and three provincial highways which provide manufacturers with access to raw materials and markets in southern Ontario. The surrounding farm-with access to raw materials and markets in food industries including feed mills and meat land provides agricultural products for food industries including feed mills and meat packers.

The city is second only to Kitchener as a manufacturing centre in the Upper Grand River Region. Approximately six thousand workers are employed in manufacturing in the city. Textiles, electric products, and iron and steel products are the most important industries although a large number of manufacturing firms, and a diversity of products ranging from hats to road machinery, is characteristic of Guelph.

The textile and allied clothing industry concentrates on yarns, hosiery and hats. The chief electrical products are small motors and electric wire. Electric transformers will be manufactured in a new plant about to be constructed at an estimated cost of eight million dollars. The factory is expected to employ a thousand workers. The iron and steel products industry includes malleable iron, heating equipment, and iron foundry products.

The city's rapid rate of industrial expansion resulted in the annexation of 2,600 acres of Guelph Township at the end of 1952. The annexation increased the size of the city to 5,800 acres and the population by eight hundred people. About fifty per cent. of the land will be used for industrial sites. Another indication of the city's rapid industrial growth has been the increase of eight per cent. in direct customers' hydro-electric power consumption in 1952 compared to 1951. Six of the Region's thirteen new establishments were located in the City of Guelph in 1952.

The city of Galt is equidistant between Toronto and London on the main line of the C.P.R. The land was originally purchased in 1817 and settlers were brought out from Scotland between 1820 and 1835. From the beginning, the Grand River, on which the city is situated, provided a source of power for local industry. By 1857, for example, there were two flour mills, a woollen mill, a paper mill, a brewery, a distillery, and an implement factory.

Now, the city has become a veritable tool shop. More than thirty companies manufacture iron, steel and brass products, and these companies continue to attract others in the same field. The diversity of products and the large number of firms in the industry result in stability in employment conditions in

The city of Stratford is located twenty-five miles west of Kitchener on the Avon River, a tributary of the Thames. The city is situated in Perth County in the midst of a fertile and extensive hinterland. The fortunes of the city have been closely tied to the railroad since the incorporation of the city in 1885. The town prospered with the establishment of the Grand Trunk Railway workshops in the city. These repair shops have continued to be the largest industry with approximately 1,200 employees at the present time.

Stratford is the Region's fifth manufacturing city. Furniture and allied wood products rank first among the manufacturers, and knit goods second. Iron and steel products are also important, but the food industry has not developed in spite of the excellent location of the city in agriculturally prosperous Perth County. There are several miscellaneous industries, and like other manufacturing centres in the Region, diversity of products is characteristic of the manufacturing.

Other important manufacturing centres in the Region include: Preston, noted for wood products; Hespeler, with woollen mills and furniture factories; St. Mary's important for cement; and Fergus, with an electrical appliance factory and feed mills.

# The Development of Hydro

It is not surprising, perhaps, that a Region of such industrial significance, should have been the first to search for more economical sources of power. On October 11, 1910, the town of Berlin (Kitchener) became the first municipality in the world to receive high tension electric power.

The development of the Hydro-Electric Power Commission of Ontario stemmed from the efforts of certain men of vision who were anxious, among other things, to facilitate the establishment of new industries in the area. In June 1902, they called together the first meeting of interested parties to consider ways and

means of procuring electric power for manufacturing and other purposes. Much of the success of this and succeeding conferences was due to the efforts of Messrs. E.W.B. Snider (Waterloo) and D.B. Detweiler (Berlin). These men organized a plan to obtain support for the project from the provincial government. Mr. Adam Beck, former mayor of the city of London, was a party to these proceedings and in May, 1906 as a member of the provincial cabinet, he introduced in the legislature "An Act to Provide for the Transmission of Power to the Municipalities". This Act was passed and in June 1906, the Ontario Hydro-Electric Power Commission was established with the Hon. Adam Beck as chairman.

The Commission made a forty-year contract with the Ontario Power Company for the purchase of power and made arrangements to sell the power to interested municipalities. The latter were required to guarantee proportions of the costs entailed in erecting power stations and lines. By April 21, 1911, fourteen municipalities, including eight in the Upper Grand River Region, had taken the necessary steps to receive power. In 1915, Berlin the first Ontario municipality to receive Niagara power consumed about 500,000 kwh of domestic electricity. By 1951, consumption of domestic electrical energy had risen to over 50 million kwh. Total electrical energy supplied to municipalities in the Upper Grand River Region increased by 141 per cent. from 1939 to 1951, reaching a total in the latter year of 618 million kwh.

#### Mining

The mining industry plays a relatively minor role in the economy of this Region compared to manufacturing and agriculture, but two of the products, cement and lime (hydrated and quick) are important in the construction industry of the Province. About three-tenths of the volume of cement and one-eighth of the value of the lime produced in the Province came from this Region. The cement is produced at St. Mary's in Perth County and lime is made in Guelph Township, Hespeler and Rockwood, all in Wellington County. Sand and gravel are mined principally in Wellington and Waterloo Counties. The value of all mineral production was \$7,253,207 in 1952.

# THE BLUE WATER REGION

#### Introduction

The Blue Water Region of Ontario consists of the five counties of Huron, Bruce, Grey, Dufferin and Simcoe in that part of the Province bordering most of the eastern shore of Lake Huron and the southern shore of Georgian Bay.

The first white men known to have visited this area were Samuel de Champlain and those who voyaged with him to Lake Huron and Georgian Bay in 1615. In 1649, Father Brebeouf and his fellow missionaries were martyred by the Iroquois near Midland. In 1822, the Region is mentioned briefly in Canadian history when Lady Sarah Maitland, the wife of the Governor, bestowed on three townships in the surveyed but uninhabited wilderness, the names of her lap dogs Flos, Tay and Tiny. Five years later, in 1827, when Goderich was founded by the Canada Company, permanent settlement of the Region was begun.

The Blue Water Region is one of the few predominately rural regions in southern Ontario. Each county included in the region has more than half its population located in rural areas, although in the largest county, Simcoe, the proportion is only 54 per cent. For the Region as a whole, the proportion is 60.8 per cent. The estimated population of Blue Water was 277,000 in 1953, the fifth largest region in the Province. It must be remembered, however, that this Region is the largest in area in southern Ontario, excluding the Highlands.

While the population is chiefly rural there is one city and a number of smaller urban centres, chiefly in Simcoe County. Those over 5000, together with their 1953 estimated populations are as follows: Owen Sound (16,600), Barrie (15,000), Orillia (12,900), Collingwood (7,600), Midland (7,500) and Goderich (5,600).

Over the period 1941-1951, population change ranged from a 22.3 per cent. increase in Simcoe to a 0.9 per cent. decline in Bruce. The Region as a whole recorded a well below average increase of 11 per cent. over the ten-year period and its proportion of the provincial total declined from 6.4 per cent in 1941 to 5.9 per

cent. in 1951. While the population is predominatly rural, the urban sector is increasing at much faster rate (15.4 per cent. as opposed to 8.3 per cent.). This is in line with the trend operating in the Province as a whole in which people are giving up rural residence in exchange for urban and suburban life.

A population analysis by age-groups shows that the proportion of young people under twenty years of age is slightly higher than that for the Province as a whole. This is not the result of a relatively high birth rate which actually is the second lowest in the Province, but rather the result of a decrease in the size of the middle age groups. Persons sixty years of age and over constitute 15.8 per cent. of the Region's population compared with 8.7 per cent. for the Province as a whole. The highest death rate in the Province and the decreasing proportion of persons in the middle age groups have resulted from this development. Migration to other parts of Ontario of persons in the latter age groups together with the fact that immigrants have tended to settle in the more industrialized areas of the Province have produced these trends.

On the basis of per capita net farm income, the Blue Water Region is Ontario's second most prosperous agricultural area. In 1951, 33.2 per cent. of the Region's labour force was occupied in farming. This proportion varied from one-half in Dufferin to about one-fifth in Simcoe. For the province as a whole, only 10.8 per cent. of the labour force is engaged in agriculture. Partly as a result of a somewhat depleted labour force, electrification and mechanization have shown extensive gains. Electric power supplied to rural operating areas in the Blue Water Region between 1939 and 1952 increased twelve fold from 11.6 million kwh to 135.4 million kwh. The value of farm machinery per occupied farm in 1951 was \$3,010 as compared with \$2,970 for the Province as a whole. Livestock raising is the chief form of agricultural activity in the Region.

#### Agriculture

Agriculture is the most important economic activity in the Blue Water Region. The estimated net farm income, \$71.5 million in 1950, exceeds the net value of manufactured products. The short growing season and the lower summer temperatures as a result of the high elevation have tended to restrict the soil produce to grains. This is marketed in the form of livestock, including beef, swine and mutton. Lacking large centres to market milk, the farmers in the Region have tended to concentrate on the production of beef rather than dairy cattle, and the proportion of beef cattle exceeds that of dairy cattle in each county of the Region except Simcoe. Nevertheless dairy products, particularly butter, are important in Brace and Grey counties. Simcoe County, part of the Toronto milkshed, markets milk in the Metropolitan Region.

The Region ranks first in the Province in the value of many farm products, notably cattle, swine, sheep, goats, poultry and eggs, and the total value of field crops grown. This position results from the large area rather than from intensity of cultivation. The concentration of cattle is exceeded by the Upper Thames Region and the concentration of swine is greater in the Upper Grand River Region. The difference in agriculture as carried on in the four counties on the west of the Escarpment and Simcoe on the east is marked. The proximity of Simcoe to the large Metropolitan area as provided a market for milk and vegetables which can be raised in the more moderate climate of that County.

The County of Huron has the largest area of improved farm land in the Province, with 615,000 acres. This area accounts for 74 per cent. of the total land in the county. The population is predominately rural. The soil is described as Huron clay loam across the wide plain which comprises most of the county. Livestock farming is characteristic of the agriculture with an emphasis on raising cattle for beef. Poultry raising is an important sideline on most farms, and the county ranks first in Ontario in the value of hens and chickens on hand.

The field crops grown in Huron reflect the importance of livestock. Hay, mixed grains, and oats account for 73 per cent. of the area in field crops. Barley and wheat rank next with nine per cent. and six per cent. respectively. Dry beans are grown in the southern townships of the county, and corn is grown for ensilage and husking. Fruits and vegetables are not important as a source of income.

In general, livestock raising, particularly cattle for beef, is the primary source of income. The county ranks first in Ontario in the value of cattle

although the proportion of cattle per acre is not as great as in the Upper Thames or Ottawa Valley Regions. The farms are more numerous and the farmers more prosperous than in the northern counties of the Blue Water Region. Estimated net farm income in 1950 was \$18.8 million, exceeded only by Norfolk and Middlesex.

The County of Bruce has 537,000 acres of improved farm land. This area accounts for only 51 per cent. of the total area of the county. Bruce penninsula, characterized by bogs and rocks, is unsuitable for cultivation, although part of the area is used as pasture for cattle. The southern part of the county is a continuation of the Huron Plain and the Saugeen clay plain. The emphasis on livestock farming, particularly cattle, is even more marked than in Huron County. Cattle are raised for beef and dairy products, particularly butter. In 1953, with a total of 6.1 million pounds, the county was exceeded only by Perth in butter production. Mixed grains, hay, and oats account for 82 per cent. of the total area in field crops.

Grey is Ontario's largest and highest county. The most striking feature of the topography are the Blue Mountains, which roughly divide the counties of Grey and Simcoe. They are a continuation of the Niagara Escarpment, extending north from Hamilton. The soil of the county contains varying mixtures of clay, and sand and gravel. As in the adjoining County of Bruce, approximately half of the total area is improved farm land. The dependance on livestock farming, including cattle, swine and sheep also corresponds to Bruce, and in the production of butter, 5.4 million pounds in 1953, it ranks first after that county. The field crops grown are similar.

The strip of fertile land between the Escarpment and Georgian Bay in Grey County is famous for apples. About eight per cent. of Ontario's apple trees grow in the Georgian Bay fruit belt. The moderating effect of the Bay on the climate and the protection afforded by the Escarpment permits the cultivation of apples which is unique in the Blue Water Region. The value of tree fruit in the county in 1950 was approximately \$345,000.

Dufferin is the smallest of the five counties comprising the Region. The land consists in the main of a high till plain characterized by silt loam soil. The elevation results in a particularly short and cool growing season, with the result that hardly any fruits or vegetables are grown except potatoes. Cattle, swine, and sheep are raised extensively as in Bruce, Grey and Huron, and livestock constitutes the chief source of income. Approximately 85 per cent. of the area under field crops is used for hay, mixed grains, and oats which suggests the dominance of livestock in the farm economy. The farm value of flax grown exceeds the value of fall wheat in Dufferin, and seven per cent. of the cultivated area is used for raising this cash crop.

The County of Simcoe is separated georgraphically from the four other counties which comprise the Blue Water Region, by the Blue Mountains, a continuation of the Niagara Escarpment. The land in Simcoe is characterized by a diversity of soils ranging from clay plains and sand plains in the Nottawasaga basin to sandy loams in the Uplands. Large areas in the southern townships remain forested or marshy, and the proportion of improved land to the total area is only 47 per cent., lowest in the Region. The geographical location of the county on the direct north-south road and rail routes to the Metropolitan Region has changed the character of agriculture in the county and given impetus to its growth

THE DAIRY PRODUCTS INDUSTRY IN BLUE WATER REGION - 1951

				77 3 - 0 D 3					
	Butter & Che		Value of Products						
County	- Factories		Creamery	Cheddar	/2:	(0) = 1			
	No.of	No. of	Butter	Cheese	Other(1				
	Est.	Employees	\$,000	\$,000	\$,000	\$,000			
Bruce	14	141	3,397.8	313.7	96.3	3,807.8			
Dufferin	14	36	930.7	-	43.9	974.6			
Grev	15	134	3,273.1	37.9	120.9	3,431.9			
Huron	13	95	1,708.7	185.0	121.0	2,014.8			
Simcoe	10	124	2,057.7		438.2	2,495.9			
Region	56	530	11,368.0	536.6	820.3	12,725.0			
Region as a		( 0	07.0	0 1	1.0	0.6			
% of Province		0.0	27.0	2.4	1.0	9.0			
(1) = maludas	fluid milk an	d cream and i	ce cream sold						

(1) includes fluid milk and cream and ice cream sol Source: Dominion Bureau of Statistics.

# FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS BLUE WATER REGION

	BLUE WATER REGION							
	(in thousands of dollars)							
Farm Product	Bruce	Dufferin	Gray	Huron	Simcoe R		s % of ntario	
Field Crops - 1953 Wheat Oats Barley Mixed Grains Potatoes Corn for fodder Hay	2,611.9	684.2 84.6 1.583.7	1,769.0 607.5 4,056.9 152.9	3,269.1	2,207.6 377.5 2,741.9 836.4	7,254. 2,716. 14,263. 1,711. 1,186.2	14.9 5 40.5 5 37.1 13.5 2 11.1	
Livestock on Hand - 1953 Cattle Swine Sheep and Lambs	20,124.0 2,732.1 255.8	964.5	22,304.4 2,621.3 979.8	3,125.8	16,354.5 2,064.1 573.6	89,832. 11.507.8 2,329.0	25.0	
Poultry on Hand - 1952 Total poultry on hand Hens & Chickens Turkeys	606.0 563.4 27.8	389.0 374.5 4.0		, -	708.6 517.8 168.4	3,410.	16.5	

Source: Ontario Department of Agriculture.

#### Manufacturing

Manufacturing in the Region is of secondary importance compared to agriculture. The number of people employed in the primary occupations exceeds the number employed in manufacturing. Industries in the Region, employing 14,800 in 1953, account for less than three per cent. of the provincial total. The gross value of production, 117 million dollars in 1950, is 1.8 per cent. of Ontario's total. The absence of manufacturing industries—the Region has the lowest per capita value of production, only \$433 in 1950—has resulted in an excess labour force, and this in turn has influenced migration from the area and resulted in somewhat lower wages than elsewhere in Ontario. The average weekly wage in 1953 was \$47.76 lowest in the Province.

The port facilities of five centres on the Great Lakes have given rise to the flour milling and shipbuilding industries. With shipbuilding came a variety of iron and steel and woodworking factories which have turned to other manufactures in addition to shipbuilding to offset the variable demand for ship products.

Livestock raised in the Region is usually marketed in the populous urban areas of the province and hence results in no widespread employment in the food processing industries. New industries are entering the Region, however, and in 1951 and 1952, eleven plants were established, five of which located in Owen Sound. Three major expansions are under way in Barrie and Owen Sound. Five new plants were established during 1953.

Owen Sound, is the largest manufacturing centre, with 2,500 employees in 1950. The progress of the city since its beginning a century ago has been closely linked with its excellent harbour. The grain trade on the lakes led to the establishment of a concrete grain elevator in 1925 with a capacity of four million bushels. In addition to water transportation, the city is served by two railways and provincial highways. The city is an important distribution centre for Grey and Bruce counties. Ten companies manufacture iron and steel products, the three largest of which employ approximately 700 workers. Furniture and other wood products are important, and three large plants employ about 650 people. Other manufactures include leather products, textiles, food and dairy products. A new plant manufacturing electric signalling equipment has recently been established.

Orillia, located on the C.N.R. and C.P.R. railroads on Lake Couchiching, the north arm of Lake Simcoe, ranks second in manufacturing with 2,100 employees engaged in the industry. Manufactures include agricultural implements, stoves, mining and lumbering machinery.

Barrie, the fastest growing town in the Region, may become an important industrial centre because of its proximity to Toronto and the new provincial highway which connects the town to the city. Present industries include a tannery, planing mills, machine shops, foundries and an electrical apparatus factory which expanded its facilities in 1952.

Collingwood, Goderich, and Midland are all important as Great Lakes ports, each with large grain elevators used for storing wheat. Shipbuilding is the most important activity in Midland and Collingwood. Goderich is noted for the mining and refining of salt. Flour mills and planing and saw mills are common to all three centres.

#### Commercial Fishing

While commercial fishing out of ports in the Blue Water Region does not compare in value with that in the Lake Erie area, certain ports are important fishing centres. Among these Tobermory, Lion's Head, Southampton and Kincardine in Bruce County, Owen Sound in Grey County, and Midland, Penetang and Collingwood in Simcoe County are the most important. Whitefish and lake trout are the chief species taken in the Georgian Bay area and perch and whitefish in Lake Huron.

#### Mining

The most important mining industry is the pumping of salt brine from the beds under Goderich in Huron County. The industry began in 1863 as the result of an unsuccessful search for oil. Salt production of 70,238 tons worth \$1,030,678 in 1952 was approximately equal to the value of sand and gravel (\$1,045,461) and twice that of Simcoe County's limestone (\$503,719).

#### THE KAWARTHA REGION

#### Introduction

The Kawartha Region consists of the counties of Ontario, Victoria, Durham, Peterborough and Northumberland bordering the north shore of Lake Ontario and extending northwards into the Canadian Shield area of the Province. This Region corresponds very closely to the drainage area served by the Trent, the largest river on the north shore of Lake Ontario.

The first white man to visit the Kawartha Region was Samuel de Champlain who, in September, 1615, accompanied a war party of Huron Indians on a foray against the Iroquois. To reach the Iroquois country south of Lake Ontario, the party travelled across the Region from north to south, following more or less the route of the present Trent Valley Canal System. In December, Champlain and the defeated Hurons returned and, moving slowly homeward on snowshoes, again traversed the Region, this time from south to north.

Although a few small trading outposts in Indian villages on the north shore of Lake Ontario were supported by Montreal and Quebec merchants, the French made no attempt to colonize the region. The posts were established to intercept Indians bound for Oswego or Albany with furs brought down from the northern hunting grounds. When their usefulness ended at the time of the Conquest they were abandoned. The fact that in 1794 Benjamin Wilson moved with his family into the log cabin which had been built as a French trading post at the mouth of Oshawa Creek, would indicate that these structures were substantially built. The one the Wilsons found standing on their United Empire Loyalist grant had been deserted for more than thirty years.

The first permanent settlement in the Region was at Port Hope, where a flourishing tradity post was in existence as early as 1778. In 1784 the land fronting on the lake between Toronto and Trenton was purchased from the Daleds to be parcelled out principally to United Empire Loyalists. This tract product log care incoming settlers until after the war of 1812, when more land was required to accommodate the flood of immigrants from the British Isles.

The majority of settlers bound for the newly-opened district tramped overland from Port Hope or Cobourg to Rice Lake which they crossed on barges. Those who could afford it, however, preferred to travel as far as York by steamer before

disembarking. From there they journeyed north, along Yonge St. to Beaverton, where they turned eastward into the wilderness. The best known of the early mass immigrations into the district occurred in 1825 when Hon. Peter Robinson brought out 2,000 Irish settlers from the neighborhood of Cork, to Peterborough and Victoria Counties.

At the same time that mass immigration to the area was being subsidized by the British Government and private philanthropists, a number of individuals, officers on half-pay and members of the leisure class, tempted by romantic accounts of life in the wilderness took up land in the district. Two members of this group, Mrs. Susannah Moodie and Mrs. Catharine Parr Traill have made permanent contributions to Canadian culture.

Apart from the beautiful Kawartha Lakes, the great tourist attractfon of the Region is the Trent Valley Canal, some two hundred and seventy-five miles in length, with locks at Peterborough which lift and lower boats a distance of sixty-five feet.

Work on the Trent Valley Canal was begun in 1833 and by 1843 locks had been built at Bobcaygeon and Lindsay. Ten years later, two steamers, the "Woodman" of Port Perry and the "Ogemah" of Fenelon Falls, were carrying lumber to Port Perry on Lake Scugog, from whence it was hauled overland, by team, to Whitby. If work on the project had been carried on consistently, the canal might have proven useful during the days when lumbering was an important local industry, although the forty-four locks, varying in width from twenty-five to thirty-three feet, have a depth of only four to six feet and the System is open for navigation only 175 days a year. However, long before the Canal was finished, other and more modern transportation facilities had been developed to serve the district and the lumbering industry had passed on.

The Kawartha Lakes Region is one of the largest in southern Ontario with an area of almost 5,000 square miles. Its population of 251,000 in 1953, however, constitutes only 5.1 per cent. of the provincial total. Population density varies from 21 persons per square mile in Victoria to 109 in Ontario County. The latter county accounts for over one-third of the total regional population. Over the period 1941-1951, the population of the Region increased by 22.3 per cent. or slightly more than the provincial average. Ontario County made the greatest advance (32.5 per cent.) while Victoria showed an increment of only 4.6 per cent. over the period.

The inhabitants of this Region are overwhelmingly of British origin, the proportion varying from 81 per cent. in Ontario County to 93 per cent. in Victoria. Other groups include French, Dutch and Ukrainian (Ontario). While the Population of the Region is only slightly more urban than rural, the former sector is increasing at a much faster rate (35 per cent. as compared with 8.5 per cent.). The proportion of the population which is rural varies from 60.2 per cent. in Durham to 32.4 per cent. in Peterborough.

Seven centres in the Kawartha Region have populations which exceed 5,000. Two of these, the cities of Oshawa and Peterborough, recorded intercensal population increases of 55 per cent. and 51 per cent. respectively, the largest increases of any cities in the Province except Sarnia.

#### Agriculture

The sale of agricultural products is an important source of income in the Kawartha Region. Farms supply food for the expanding urban areas. Milk and meat are marketed in Oshawa and Peterborough, and in Toronto. The estimated net farm income in the Region in 1950 was \$40.1 million, fourth highest in the Province. The high rank of total net farm income results from the large area of improved farm The high rank of total net farm income results from the large area of improved farm land, rather than from the use of intensive farming techniques. In the main, farmland may be described as general, except for a narrow strip of land parallel to the shore of Lake Ontario where vegetables, fruit and some field crops are cultivated as cash crops. The net income per occupied farm \$3,155 in 1950, is close to, but slightly higher than, the provincial average.

The proportion of the labour force engaged in agriculture in the Region varies, depending on the rural-urban distribution of the population. Of the three

predominantly rural counties, the proportion is highest in Northumberland (32 per cent.), followed by Victoria (29 per cent.) and Durham (26 per cent.). In these areas it appears that agriculture contributes a greater proportion of the net income than manufacturing, but this is not typical of the Region as a whole.

The topography and the soil of the Kawartha Region follow a pattern of bands roughly parallel to Lake Ontario. The southern section comprises the Iroquois Plain and the slopes approaching the height of land. Numerous small streams emptying into Lake Ontario, drain the area. The Iroquois Plain, at one time part of the bottom of an ancient lake of the same name, contains excellent clay and sand soils, built up at the deltas of rivers draining into the lake. The proximity of Lake Ontario exerts a moderating influence on the climate, and this has permitted the cultivation of fruit and vegetables which require a long growing season. The railroads and highways provide a rapid means of marketing the produce, essential for perishable goods. Vegetables and field crops are grown chiefly on clay soils, while fruit is cultivated in the sandy sections.

The area north of the watershed is drained by the Trent River and the Kawartha Lakes. The topography of the land is characterized by hog-back hills and rolling country. The soils vary, but in general may be described as clay loam. Stoney soils are common in some sections, and have tended to encourage livestock farming. The hilly terrain, and the lack of adequate rain during the summer months, often resulting in droughts, have underscored the need for soil conservation. This depends in part on livestock to maintain the organic content of the soil. While the land is well-drained for the most part, the valleys are commonly swampland.

There are patches of good soil in the areas that fringe the precambrian rock of the Canadian Shield, but most of the land is too stoney for field crops and can be used only for grazing. Some of the area could be reforested to prevent erosion of the shallow soil and to retain water. Sheep and beef cattle are common, and the Region ranks second in the Province in the value of sheep raised, with \$1.6 million in 1952, 14 per cent. of the provincial total.

The southern sections of Durham County are devoted to mixed farming, with an emphasis on dairy cattle. Swine and beef cattle are more numerous in the northern sections. Field crops include hay, mixed grains, oats and fall wheat, the first three of which are used principally as livestock feed. The Iroquois Plain section, about eight miles wide in Durham, is used chiefly for tree fruits, the value of which exceeded \$266,000 in 1950. A large cold storage plant for fruit has been opened at Newcastle. The sandy areas have been used for growing tobacco, especially in the Port Hope area, and in 1951 2,000 acres were planted. The value of the crop, however, was less than 2 per cent. of the provincial total.

Ontario, the most highly cultivated county in the Region on the basis of net farm income and improved farm land, is very much the same as Durham in topography and agriculture except that the northern part of the county extends into the Simcoe Lowlands. Cattle, over 60 per cent. of which are kept for dairying, are the Simcoe Lowlands. Cattle, over 60 per cent. of which are kept for dairying, are the most important source of income. Swine and sheep are also important, particularly in the northern sections. The principal field crops are the staples: hay, mixed grains, oats, and fall wheat. Potatoes are grown as a cash crop, valued at \$1,095,000 in 1953. Fruit and vegetable products grown along the shore plain exceeded \$338,000 in 1950, but were not as important in Ontario County as in Durham and Northumberland.

Peterborough County is bisected by the precambrian shield, which precludes almost all profitable farming north of its boundry. The south-west half of the county is characterized by general farming, including cattle, swine and sheep raising, and field crops, chiefly hay, oats, and wheat. Fruit or vegetables are not grown to any extent. The terrain is rolling and hilly, usually well drained but subject to drought and erosion in the summer months.

The topography and soil of Victoria County correspond approximately to that of Peterborough County, with hilly terrain and clay loam soils. In the other county of the Region over 60 per cent. of the cattle are raised for dairy products, chiefly milk, but in Victoria, which lacks a large urban market, 65 per cent. of the cattle are raised for beef. Swine and sheep are also important livestock. Field cattle are raised for beef. Swine and oats. Wheat is not grown as much as in the other four counties. Fruit and fresh vegetables are not grown as cash crops.

## FARM VALUE OF SELECTED AGRICULTURAL CROPS - KAWARTHA REGION. (in thousands of dollars)

			Peterbor	-	Northum-		egion a %
	Durham	Ontario	ough	Victoria	berland	Region of	Prov.
Field Crops - 1953							7-
Wheat	893.0	1,195.4	920.7	604.2	895.3	4,508.6	11.5
Oats	762.2	1,067.6	880.2	877.3	1,444.7	5,032.0	10.3
Mixed Grains	800.4	1,344.8	212.6	704.4	408.2	3,470.4	9.0
Potatoes	278.0	297.4	92.0	90.0	338.0	1,095.4	8.6
Corn for fodder	188.5	322.3	152.6	116.1	224.2	1,003.7	9.4
Hay	1,295.0	2,659.0	1,842.0	1,746.0	1,905.0	9,447.0	10.1
Livestock on hand-1953							
Cattle	6,630.1	10,708.0	5,891.3	9,097.2		39,374.4	9.9
Swine	701.2	1,514.8	409.3	657.3		4,183.4	9.1
Sheep & Lambs	121.4	335.3	151.1	444.0	158.5	1,210.3	12.3
Poultry on hand - 1952 Total poultry on hand Hens & Chickens	376.1 338.3	563.9 504.9	391.3 366.9	301.0 269.0		2,117.6 1,936.7	9.0

Source: Ontario Department of Agriculture

#### Manufacturing

The Kawartha Region lies at the eastern end of Canada's most highly industrialized area which extends around the end of Lake Ontario, as far as Niagara. One of the examples of the interdependence of the various parts of this area is the existence of McKinnon Industries in St. Catharines (Niagara), a wholly-owned subsidiary of General Motors in Oshawa. Oshawa is linked closer to this lakeshore development because of its location and dependence on one major industry, and consequently has grown faster than Peterborough in the decade 1939-49. Manufacturing in Peterborough is more diversified resulting in greater stability. The products of both centres are marketed throughout Canada. The two cities have enjoyed above average increases in population and in value of production during the post-war years.

The city of Oshawa is one of the three great automobile centres in Ontario and Canada. The industrial growth of the city reflects the expansion of the industry during the war and post-war periods. In 1949, Oshawa ranked fourth in Ontario and eighth in Canada on the basis of the gross value of manufactured products. One motor company, General Motors, accounts for virtually all the production, although there are approximately fifty manufacturing plants. The products include safety glass, textiles, castings, stampings and leather. Many of these products are used in the fabrication of motor vehicles, and firms supplying them are wholly or partially dependent on the fortunes of the automobile industry.

There appears to be no geographical reason for Oshawa's development as a manufacturing centre. Windsor and Hamilton are more likely centres. The location of Oshawa on Lake Ontario is of minor importance—there are several ports on the lake with better harbours. Credit must be given to the pioneers of the industry whose initiative and technical skill made development possible. The forerunner was a carriage shop which was converted to manufacture automobiles in 1915.

Employees in Oshawa's factories total approximately 14,800 of whom 10,100 work for the motor company, and an additional 1,500 for companies supplying parts and materials in 1952. The gross value of their production exceeded \$157.7 million in 1949, the highest in the Region.

Peterborough, located on the Otonobee River, is served by both railways and two provincial highways. The settlement began as a milling centre, utilizing the fall of the river for power, and became important as a lumbering town. It enjoyed the railway and canal booms and prospered. Livestock raised on the farms surrounding the centre gave rise to a meat packing plant. The proximity of Peterborough to the popular Kawartha Lakes gave emphasis to the tourist trade and even influenced manufacturing, evidenced by the fact that the city has two canoe companies and Canada's only outboard motor factory.

The Otonobee River, which falls almost 300 feet as it approaches the city, was harnessed as a source of hydro electricity when manufacturing displaced lumbering in importance. This gave the community a head start in industrial development. The main works of Canada's largest manufacturer of electrical apparatus, Canadian General Electric Company, is located there. The rapid growth of the electrical apparatus industry over the last decade has been reflected in the above-average intercensal population increase of Peterborough. This remains true even taking into account the increase due to the annexation of adjoining township land by the city.

Diversity of products is characteristic of Peterborough in spite of the large size of the electrical apparatus firm. Products include cereals, meat packing, outboard motors, canoes and boats, clocks, textiles and carpets.

The gross value of the products of Peterborough's one hundred factories exceeded \$100 million in 1950. Approximately 9,800 employees were engaged in manufacturing in that year.

There are other important but much smaller manufacturing centres in the Kawartha Region. Three of these, Port Hope, Bowmanville, and Cobourg, are located on the lake where both railways and the highway pass. These transportation facilities have been valuable assets for industrial development. The famed Eldorado Refinery refines radium in Port Hope. There are a number of small industries, including a sanitary fixtures factory.

Bowmanville's first industry was a lumber mill, but at present it is best known for its woodworking and cabinet factories. Other industries include rubber products and iron castings. Cobourg is the site of the army's new \$13 million ordinance depot. The town has been important as a distributing centre since the Loyalist settlers entered Upper Canada. Present industries include plastics, iron castings, small arms, furniture and food concentrates. The gross value of production exceeded \$7.7 million in 1949.

Lindsay, located inland on the Scugog River is served by both rail-ways. The town grew, like Peterborough, as a milling centre for grain and lumber. In recent years a number of industries have established there, notably woodworking and furniture factories. A government-owned munitions plant is located in the town. The gross value of production in 1950 was approximately \$7 million.

An interesting feature in the Kawartha Region is the development of a former war industry site into a manufacturing centre. Ajax is an example of a new and fully planned community building up around a core of industry. Road and rail transportation serve the industries, but harbour facilities are not available. The lake appears to be unimportant except as a source of water. Most of the seventeen firms located there manufacture iron and steel products, but the chemical industry is also represented.

Separate employment indexes are not available for Oshawa and Peterborough, but the regional employment index for the Kawartha Region reflects the average of employment levels in the two cities. This is not an entirely satisfactory indicator of employment in either centre since Oshawa is dependent on one industry and subject to more variation in employment levels than Peterborough where industry is more diversified and employment levels are less subject to seasonal variations.

A study of the index of manufacturing employment reveals a difference between high and low periods of 18 per cent. during 1953. By way of comparison, the adjacent Metropolitan Region with its greater size and diversity of manufacturing industries, showed a difference of only 6 per cent. in the same period. The average employment index for 1953 based on 1949 was 123.2 the greatest increase of any region southern Ontario since the base year, and third largest in the Province. The establishment of three new industries in 1952 and seven in 1953 suggests a continuation of this trend of rapid industrialization.

#### Mining

The value of mineral production in the Kawartha Region in 1952, was \$2,933,070, of which approximately one-third (82,681 tons worth \$1,111,950) was

accounted for by nepheline syenite from Peterborough County. The only Canadian producer, American Nepheline Limited is in Methuen Township. Ore is hauled by truck to the mill at Lakefield, whence it is shipped to glass and ceramic industries. Granite and limestone were quarried in Peterborough and Victoria; sand and gravel were quarried there and also in the remaining counties.

#### THE QUINTE REGION

#### Introduction

The Quinte Region of Ontario consists of the counties of Hastings, Lennox and Addington, Frontenac and Prince Edward, bordering the north shore of Lake Ontario between the Kawartha and Upper St. Lawrence Regions. This Region is the fourth largest in area in Southern Ontario and extends north a considerable distance into the Canadian Shield. All the centres with over 3,500 population in the Region are located on the lakeshore and all are ports. Kingston and Belleville are the most important in this respect.

Although the Bay of Quinte area was visited by Champlain in 1615, when he accompanied the Hurons on their unsuccessful foray against the Iroquois, no settlement was made there by the French until 1673: In that year the Governor, Frontenac, accompanied by LaSalle, journeyed up the St. Lawrence from Montreal to the River Cataraqui. A seigneury was established and given to La Salle, who built a fort at the mouth of the river and named it Fort Frontenac in honour of his patron and friend.

The outpost played an important part in the border warfare between the French and English colonies. In 1756, an expedition from there headed by Montcalm captured Fort Oswego taking 1,600 British prisoners, among them a New Yorker, Michael Grass, who was interned at Fort Frontenac. Two years later the British under Colonel Bradstreet retaliated by destroying the fortress.

For the next quarter of a century the site was deserted. Then, in 1784, Michael Grass returned with a band of Loyalists to settle on the grants provided for them. At the same time, grants in the neighbourhood were given to the men of Jessup's and Rogers' Corps and other Loyalists.

The Loyalists who settled in the Quinte Region represented the solid middle and professional classes of New York State. Many were from families which had lived in America for generations. Prompted by the same strength of character that marked their adherence to established government during the Revolution, they faced the task of building a new country.

As the point at which goods coming up the St. Lawrence were transshipped for transport further west, Kingston was a vitally important town before the era of the railroad. As time went on it became an important manufacturing town as well as the seat of two archbishoprics, Anglican and Roman Catholic. Following the Act of Union in 1841, it became the first capital of United Canada and remained such until 1845 when the government was moved to Montreal.

The cornerstone of Kingston's first college, Regiopolis, was laid in 1838, but after thirty years of struggle the institution closed from lack of funds. It was later re-organized on a less ambitious scale and is now a boarding and day school for boys. Queen's University opened its door to ten students in 1842. The Royal Military College was established in 1876 to train officers for the Canadian Army and although it was closed temporarily during World War II it re-opened in 1948 as a tri-service college.

Belleville, the community that serves the western part of the Region commercially and culturally, began in 1787 with the opening of a small general store by William Bell. Two years later, after fifty United Empire Loyalist families had settled on their grants in the immediate neighbourhood, the first local industry, a lumber mill, was erected on the Moira River by Captain John Walden Meyers. His home was the first brick house built in Upper Canada. In 1816, the community changed its name from Meyers Creek to Belleville, in honour of Lady Arabella Gore, wife of the Lieutenant Governor.

Many of the towns and villages in the Region have histories that stretch back to the first days of settlement. Napanee, Trenton, Bath, Picton, Demorestville and a host of other communities played a significant part in the development of the area. A grist mill, a saw mill, a general store, a tavern or two, a church, a school and a shipyard formed the nucleus of many an early village in the Quinte Region.

#### Population

The population of the Quinte Region, approximately 186,000 in 1953, represents about 3.8 per cent. of the provincial total. Persons living in rural areas outnumber those in urban centres by a small margin, the difference having narrowed considerably over the period 1941-51. Population in the Region as a whole grew by some 17 per cent. over the past decade, a rate somewhat below the provincial average of 21.4 per cent. Within the Region, growth varies from 23.1 per cent. in Frontenac to 5.8 per cent. in Lennox and Addington. The latter county together with Prince Edward have predominantly rural populations and showed the smallest rates of growth. The Regional birth rate approximates the provincial average but the death rate is somewhat higher, particularly in Lennox and Addington (12.4 as opposed to 9.6).

Approximately one-third of the Region's population lives in the two cities of Kingston and Belleville. These centres recorded intercensal population increases of 11 per cent. and 24 per cent. respectively. There are three municipalities with populations over 5000: Kingston (39,000), Belleville (20,100) and Trenton (10,300).

Over 80 per cent. of the inhabitants of the Quinte Region trace their ancestry to the British Isles. Persons of French origin account for somewhat less than 10 per cent. of the populations of Frontenac and Hastings while considerable numbers of persons of Dutch origin dwell in Lennox and Addington, Prince Edward and Hastings.

#### Manufacturing

The industry distribution of the labour force reveals that 24.0 per cent. of the total is engaged in manufacturing in the Quinte Region. By way of comparison 28.2 per cent. and 17.5 per cent. are in services and agriculture, respectively. There were an estimated 16,500 employees in manufacturing industries in 1953. The index of manufacturing employment shows a 10.6 per cent. increase since 1946 but average wages and salaries, \$54.98 in 1953, remain among the lowest in the Province. Lower wages and salaries appear to be a characteristic of the less highly industrialized regions. A number of new plants have located in the area since 1939, however, and the Region is becoming more dependent on manufacturing as a source of income. During 1953 alone, seven new plants were established in the Quinte Region.

The most striking feature of manufacturing production has been a shift in the type of goods manufactured. Shipbuilding and steam locomotive construction declined while the new goods, aluminum products, nylon, electrical apparatus, and diesel locomotives set a pattern of unique industrial growth. The increase in employment in the Quinte Region during the post-war period reflects the continuing demand for these new products, particularly aluminum.

Employment in manufacturing in the Region varies considerably as a result of seasonal variations in the canning industry. Employment indices reflect this aspect, showing peak employment during the harvesting season and a low in January. The range between the high and low periods was 14.6 per cent. of the average number of employees during 1953. Excluding the canning and cheese factories, the figure would be much less, particularly in Kingston and Belleville.

Kingston, the largest manufacturing centre in the Quinte Region, has led the area in industrial growth over the last decade. The gross value of production in 1950 exceeded \$53 million, an eightfold increase since 1939. Manufacturing employment increased 241 per cent. over the same period.

growth. The good harbour, the most easterly on Lake Ontario, and the stands of timber led to the growth of a shipbuilding industry during the nineteenth century. The city lacks an extensive trading area common to most cities, but its unique location approximately equidistant between Montreal and Toronto on the main road, rail and water routes is favourable to firms marketing products in the two major Canadian market areas.

The Aluminum Company factory, the largest employer in the greater Kingston area, was established in 1939 and put into operation the following year. Products from the works include aluminum sheets and strips, extruded shapes including aircraft parts, tubes, foil, and forgings. The total number of employees at the works has varied from a low of 1,700 in 1946 to the present average of 2,700. The Canadian Industries nylon plant, established in 1942, ranks second as an employer, followed by the diesel locomotive works and the shipyards. Numerous other factories manufacture a variety of products, including leather, sheet metal products, iron castings, and chemical dyes.

Belleville has enjoyed a decade of industrial growth similar to that in Kingston. Employment in manufacturing industries has increased 143 per cent. from 1939 to 1950, and the gross value of production has increased fourfold over the same period. The number of employees was 2,800 in 1950, and the gross value of production \$25 million.

The city manufactures a diversity of products including electrical apparatus, bakelite products, clothing, and cheese. Located beyond the municipal boundary is a cement company, reputed to be the largest in Canada, a distillery, and an industrial alcohol plant.

The largest single employer of labour in the city is the Canadian National Railway repair shop, with an estimated 1,000 employees, followed by the Northern Electric Company with approximately 900. The latter, a post-war industry in Belleville, has recently completed an expansion project. The cement plant and the bakelite company have similar schemes underway.

The town of Trenton, located at the mouth of the Trent River on the Bay of Quinte is served by the main road and rail routes paralleling Lake Ontario. Local industry has been largely dependent on the food processing and textile industries. Canning factories use vegetable produce grown on farms in Northumberland, Hastings, and western Prince Edward counties. Manufacturing has not increased during the post-war period at a rate comparable to Kingston or Belleville, but recently new industries have been established in the town, including a structural steel plant and a copper cable plant. A lumber company has completed a large mill across the bay at Carrying Place.

Other important manufacturing centres include Napanee and Deseronto. Picton, Wellington, and Bloomfield are noted for canning factories which use local vegetable produce. The Bata Shoe Company is located in Batawa north of Belleville. The Deloro Smelting and Refining Company, established in 1916, is located in Deloro. Operating on local ore at first, the company is now dependent on Northern Ontario ore for the refining of cobalt, silver and arsenic. The company employs approximately 400 workers. Madoc is famous for the talc mine located nearby and Marmora figures in the iron ore development now in progress.

#### Agriculture

The Canadian Shield crosses the three northern counties of the Quinte Region, Frontenac, Hastings, and Lennox and Addington, limiting agricultural development largely to the southern sections of these counties. Only 21.3 per cent. of the total area of the Region is classed as improved farmland (1951), and in Frontenac County the proportion is only 16.3 per cent. The southern sections of the three counties above, and most of Prince Edward County, are characterized by shallow clay soils over a limestone plain. Most of the farms are located in this area, but there are pockets of fertile soil on the Shield. A number of farms are located in the Bancroft area. The Moira, Salmon, and Napanee Rivers, emptying into the Bay of Quinte, and their tributaries outline the principal drainage basins. These rivers are characterized by sharp gradients upstream which provided an early source of power for mills and attracted the first settlers.

The character of the soil has determined, in part, the type of farming in the Region. Dairy products, particularly butter and cheese, are the most important source of farm income. The number of cattle relative to the improved land area is high, and the acreage of hay grown in the Region represents more than half of the total area devoted to field crops in the three mainland counties. This indicates the importance of cattle as opposed to cash crops as a source of income. Approximately 69 per cent. of the cattle in the Region, are raised for dairy products and this pattern is repeated in each of the counties, particularly Prince Edward, where only four per coat. of the cattle are raised for beef. The sale of dairy cattle has become an important source of income in recent years, and on some farms it has replaced dairy products as a primary source of income.

The production of cheddar cheese in Canada has been largely limited to the central provinces, particularly Ontario, which accounted for 76 per cent. of the value of the national production in 1953. In Ontario, the eastern counties and the counties of Oxford and Perth have become famous for the production of Cheddar cheese, and it is in these areas that most of the cheese is made. The Quinte Region is included in this area, producing cheese in each of the four counties and accounting for 22 per cent. of the Ontario total in 1953. The county of Hastings ranked third in the Province in this respect during 1952 but declined to seventh place in 1953. There are an estimated fifty cheese factories in the vicinity of Belleville, for example, and a new cheese storage plant has recently been completed in that city at a cost of approximately \$400,000.

Production of cheese is seasonal, with most factories opening in April and closing in October. Practically all the cheese is produced when the cows are on pasture, a method particularly suitable to the Quinte Region, where it is difficult to raise a sufficient quantity of cereals to maintain the cows in milk during the winter season. Summer dairying usually results in a lower cost of production than that for herds which are milked throughout the year.

Cheese production in Canada has declined more or less continuously since 1900, with marked increases during war periods. The domestic and the United Kingdom markets have absorbed almost all the production, the latter particularly during wartime when cheese was used as a partial substitute for meat. Canadian production of cheddar cheese, 220 million pounds in 1900, remained high during the first world war but declined to 149 million pounds in 1920. Production fell to a low of 99 million pounds in 1934, but rose to a high in 1942 of 206 million pounds as a result of exports to Great Britain. During the last four years (1950-53), production declined from 98 million pounds in 1950 to 67 million pounds in 1952, the lowest during this century, and rose slightly to 70 million pounds in 1953. The loss of the British market reduced exports from 63 million pounds in 1950 to a low of 3 million pounds in 1952, and this in turn forced the domestic price down as surplus stocks increased.

An increase in the number of dairy cows and a drop in their export, combined with high manufactured milk inventories, resulted in increased cheese production in 1953. A purchase by Britain of 10 million pounds of chellar cheese late in 1953 reduced the stocks, however, and cheese exports from Canada in 1993 totalled 16 million pounds. The total stocks on hand in Canada at January 1st 1994 amounted to 33 million pounds, compared to 41 million pounds at the same date in 1952.

Domestic consumption has remained relatively constant with 55 million pounds in 1950 and 53 million pounds in 1952.

The loss of the chief customer in the export market resulted in efforts to stabilize the price of cheese in Canada and increase domestic consumption. The Ontario Cheese Producers Marketing Board was set up in Ontario to support cheese prices, and remedial plans such as uniform grading are being devised to facilitate the prices, and remedial plans such as uniform grading are being devised to facilitate the product. Mild cheese made from pasteurized milk appears to be gainmarketing of the product. Mild cheese made from pasteurized milk appears to be gainmarketing of the retail market and this should result in an increase in capital consumption. It is interesting to note that Canada's annual consumption of cheese is consumption. It is interesting to note that Canada's annual consumption of cheese in Canada appears unlikely Britain. A substantial increase in consumption of cheese in Canada appears unlikely Britain. A substantial increase in consumption of cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present, however, and hence surplus milk in the cheese producing rease will be at present.

Butter production in the Quinte Region was 5.8 million pounds, only 7.3 per cent. of the provincial total, but at 1952 average prices the value of the butter production exceeded that of cheese. The absence of large urban centres in eastern Ontario has encouraged the production of milk for cheese, butter and milk products rather than for fluid consumption.

Among the field crops grown in the Region, hay and oats are the most important, both comprising 7.5 per cent. of the value of Ontario's production in 1953. Wheat, corn for fodder, and mixed grains are also cultivated on a small scale. Potatoes are grown as a cash crop but the value of the crop was estimated at \$552 thousand in 1953, only 4.3 per cent. of the provincial total.

Prince Edward County corresponds to the other three counties of the Region in that the bedrock formation is limestone, and the soil covering the rock is shallow in more than half the area. Summer dairying rather than intensive crop cultivation represents, therefore, the best use of the land. In the western section of the county and the area immediately surrounding Trenton the soils are deeper and richer clay loams which have been cultivated intensively. Green peas, sweet corn, and tomatoes are grown for the canning factories in Trenton, Wellington, Bloomfield and Picton. The county ranked first in the Province in 1950 in the production of green peas and sweet corn, and fourth in tomatoes. Of the total value of these products grown in the Province, Prince Edward County accounted for 19 per cent., 17 per cent., and 14 per cent. Cucumbers were grown on a commercial scale for the first time in 1951 to supply a pickel factory in Brighton at the suggestion of the Ontario Department of Agriculture. Over 4,000 acres were planted in 1952, and the experiment is considered a success. The county is also noted for its orchards but the value of the apples and cherries, the chief fruits, represent only 4.2 per cent. and 2.1 per cent. of Ontario's total.

# FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS - QUINTE REGION (in thousands of dollars)

	Frontenac	Hastings	TICITION O	Prince Edward	Region	Region as a % of Ontario
Field Crops - 1953 Wheat Oats Hay	76.4 624.7 2,232.0	347.9 1,764.4 2,639.0	389.9 598.3 1,188.0	664.1	1,244.2 3,651.5 7,036.0	7.5
Livestock on Hand - 1953 Cattle Swine Sheep and lambs	5,811.9 358.0 121.7	7,869.2 1,313.8 224.4		10 -	21,776.8 2,416.7 621.3	
Poultry on Hand - 1952 Total Poultry	175.7	263.4	322.5	255.2	1,016.8	4.3

Source: Ontario Department of Agriculture.

#### DAIRY FACTORIES IN THE QUINTE REGION - 1951

County  Frontenac Hastings Lennox & Addington Prince Edward REGION		R & CHEESE CTORIES No. of Employees  185 146 59 38 428	Creamery Butter \$,000 920.8 1,409.3 202.9 121.2 2,654.2	TALUE OF PR Cheddar Cheese \$,000 1,157.5 1,844.8 1,673.6 1,053.5 5,729.4	Other (1) \$,000 1,178.5 470.7 131.5 63.6 1,844.3	Total \$,000 3,256.7 3,724.9 2,008.0 1,238.3 10,227.9
Region as a % of Province	15.5	5.5	6.3	25.4	2.7	7.7

(1) includes fluid milk and cream and ice cream sold. Source: Dominion Bureau of Statistics

#### Mining

Mineral production in the Quinte Region was valued at \$8,664,082 in 1952, three-quarters of which was attributable to the making of cement at Belleville. Other important minerals include limestone, quartz, fluorspar, talc, and feldspar. The Region has experienced, over the years, many and varied mineral discoveries. The first gold discovered in Ontario was near Madoc, Hastings County, in 1866.

Feldspar production in Ontario began about 1900 in Bedford Township, Frontenac County. Production now is centred in Frontenac and Hastings. The mineral is used chiefly in the ceramic industry, in glass making, and porcelain. Fluorspar occurs near Madoc in Hastings. Used extensively as a flux in the making of aluminum and steel, Ontario's entire output came from this Region. Talc deposits found near Madoc are used in the manufacture of paints, roofing, pulp and paper, and rubber.

Stone quarrying in the Region was valued at more than \$600,000 in 1952. Limestone was the most valuable (\$347,529) and marble was second (\$195,456). Most of Ontario's marble came from Hastings and Lennox and Addington.

In 1820, a blast furnace was built at Crow River, Marmora Township to process the iron ore found in the vicinity. Excessive transportation costs and inexperience led to the eventual failure of this and other similar ventures.

Of particular interest at the present time are the operations of the Bethleham Steel Corporation (Marmoraton Mining Company Limited) near Marmora. Large quantities of magnetic iron ore have been proven (at least 20,000,000 tons) beneath a 130-foot thick limestone capping. The Company's plans include a crushing, pelletizing and concentrating plant on the mine site and an ore dock near Picton on the Bay of Quinte. It is expected that about 225 men will be employed on this operation. Further exploration is being conducted in this area by various other firms including United States Steel, Jones and Laughlin, Steel Company of Canada, and W.S. Moore.

Further investigation is being carried out in an area about ten miles north of Marmora where low grade nickel-copper deposits have been found. In the Bancroft area of Hastings, exploration for uranium is being carried out while substantial quantities of lead and zinc are known to exist in Frontenac.

#### THE UPPER ST . LAWRENCE

#### Introduction

The Upper St. Lawrence Region of Ontario consists of the counties of Leeds, Grenville, Dundas, Stormont and Glengarry in the extreme eastern section of the Province adjoining the St. Lawrence River. In its entire length from east to west it is bordered on the north by the Ottawa Valley Region.

The earliest white settlement in the Upper St. Lawrence Region was La Gallette, a military outpost built by the French in 1630, three miles east of Prescott. In 1749, Fort La Conception was built at the site of the present village of Maitland and, in 1760, Fort de Levis was erected on nearby Chimney Island. It was at Fort de Levis that the French made their last stand in Canada, the garrison of three hundred holding out against General Amherst's army of eleven thousand for two days while the British cannon literally demolished the fort around them.

Although a trickle of refugees began moving into the district during the Revolutionary War, the earliest mass migration occured in 1784 when land grant a were distributed to the United Empire Loyalists at New Johnstown. At that time the Highlanders from Glengarry, who had been brought to America by Sir William Johnstoff in 1773 and served under his son, Sir John, luring the war, received grants of 1911 at the eastern end of the district, where they were soon joined by relatives and friends from Scotland.

Other Loyalists went farther up the River. Those under Major Jessup

settled in the vicinity of Prescott, while a group led by Captain Sherwood founded the present town of Brockville. In 1788 the first schoolhouse in the area was built in Matilda Township and a permanent teacher hired. Within the next four years several more lower schools were established and, in 1803, the earliest secondary school in Upper Canada, the Cornwall Grammar School, was started by the Rev. John Strachan.

As they reached maturity, the children of the Loyalists began to claim the grants in the hinterland to which they were entitled and, about the same time, an increasing number of immigrants from Great Britain and the United States moved into the country. After 1826, the Rideau Canal facilitated the opening up of the back country by linking it with Kingston and Ottawa. Villages and towns such as Kemptville, Winchester, Chesterville, South Mountain and others gradually developed.

Such place names as Moulinette and Mille Roches would indicate that, from the beginning, French families had lived in the district. Many more settled here early in the nineteenth century, preferring to own outright the land they worked, rather than hold it under the system of Seigneurial Tenure which obtained in Quebec at that time.

A few miles west of Cornwall is the site of the proposed St.Lawrence Seaway and Power Development. The International Rapids Section is expected to provide 2,200,000 horsepower to be divided equally between Canada and the United States. Plans are presently in progress for the completion of this project by the Province of Ontario and the State of New York. The proposed dam to the west of Cornwall will result in part of the river frontage becoming submerged. The towns of Iroquois and Cardinal will have to be relocated and a new highway built.

The construction of this project will involve heavy demands for materials and labour and will provide at least a temporary stimulus to the whole Region.

Within the Region are located two bridges linking Canada with the United States: The Roosevelt International Bridge at Cornwall and the Thousand Islands Bridge at Ivy Lea. In addition, ferry service operates at three centres in the Region: Prescott, Gananoque and Brockville. In all, some 200,000 foreign-owned vehicles entered Ontario through the Upper St. Lawrence Region in 1951, over half of them entering by way of the Thousand Islands Bridge.

#### Population

The estimated population of the Upper St. Lawrence Region was 144,000 in 1953. The 1951 census figure, 137,854, represented an increase over the decade of only 7.8 per cent., one of the smallest rates of growth of any area in Ontario. Dundas and Glengarry showed net losses of population over the ten-year period. Stormont, with an increase of 18.5 per cent. showed the greatest rate of growth in the Region. The two centres with a population exceeding 5,000 in 1953 are Cornwall (16,800) and Brockville (13,700)

The rural character of the Region is evident from the preponderance of rural population in four of the five counties (Stormont excepted). In Glengarry, there are seven persons living in rural areas for each one in the urban centres and the total population in this county showed a decline of 5.5 per cent. over the decade.

The distribution of the population of the Region by country of origin varies widely from county to county and has changed considerably since the turn of the century. Percentages shown below in brackets refer to the census of 1901. In Leeds and Grenville (united), 87.4 per cent. (93.4 per cent.) of the total population is of British origin while in Stormont and Glengarry, these percentages are 40.8 (54.8) and 40.6 (65.3), respectively. Persons of French origin constitute the largest proportion of the total population in Glengarry, 56.8 per cent., (32.6 per cent.) and in Stormont, 48.7 per cent., (27.1 per cent.). The third largest group, persons of German origin, bulks largest in Dundas County, representing 5.0 per cent. (20.4 per cent.) of the total.

place, the percentages of people of British origin have decreased proportionally in all but Dundas County over the past fifty years. The proportion of people of French origin, on the other hand, has increased substantially in all counties over the same period. Persons of German origin who, at the beginning of the century, constituted significant proportions of the population in Dundas (20.4 per cent.) and Stormont (15.5 per cent.) now form very small parts of the whole, 5.0 per cent. and 0.9 per cent., respectively.

#### Manufacturing

Manufacturing in this Region is concentrated largely in Stormont and Leeds counties along the shore of the St. Lawrence River. The reasons for location there are the existence of towns along the river with accompanying labour supplies, transportation supplied by the Canadian National Railways, and the river itself, both as a freight carrier and as a raw material for the various chemical works.

Manufacturing plants employ 30 per cent. of the total labour force in the Region. Estimated employment in the manufacturing industries during 1953 was 13,100. Growth in recent years has been modest compared to other regions in the Province, but the increase in the number of plants entering the Region suggests that more substantial gains may be made in the near future. The index of manufacturing employment, 106.2 in 1953, shows an increase of 6.2 per cent. since the base year, 1949. Average wages and salaries during the period were \$54.33, third lowest among the regions.

The demand for labour is very weak in the spring months, at which time job applications outnumber jobs by fifty to one. (From Unemployment Insurance Commission reports).

The most important manufacturing centre is Cornwall, the only city in the Region. Cornwall had a gross value of production of about \$63,600,000 in 1950, which was nearly 50 per cent. of the regional production (\$139,900,000), and employed slightly more than half of the industrial workers (7,000 out of about 12,500) to make the goods. The city has about thirty manufacturers.

The two largest chemical industries, each of which has well over 1,000 employees, are Howard Smith Paper Mills, established in the last century (paper, cardboard, pulp, fibreboard, chlorine) and Courtauld's Limited, established in 1925 (rayon yarn and fibre). Both plants have just completed large expansion programmes.

The Dominion Tar and Chemical Company produces fibre conduit (for electric insulation) in a small plant which will be expanded this year. Several small plants of Canadian Industries Limited produce basic industrial chemicals (chlorine, caustic soda, hydrochloric acid, carbon bi-sulphide). In addition, several other chemical plants are being built in the Cornwall area. Among these are British Cellophane Limited, Howard and Sons (Canada) Limited (solvents and technical chemicals).

The largest employer (and one of the oldest) is Canadian Cottons Limited with about 2,000 employees who make a wide variety of fabrics. This company has also completed a large expansion programme. The city has several smaller non-chemical plants. These make such products as brass and bronze castings, men's clothing, furniture and fire extinguishers.

Brockville, the second industrial centre in the Region, had a gross value of production of about \$28,000,000 in 1950. The largest employer in Brockville (and in Leeds County) is Phillips Electric Limited which has nearly 1,000 employees, compared with a total of 2,000 factory workers in the centre. This firm makes hydro cables and telephone equipment (Phillips Electric should not be confused with Philips Industries of Toronto, which makes electronic equipment). The second with Philips Industries of Toronto, which makes electronic equipment). The second with Philips Industries of Toronto, which makes electronic equipment). The second with Philips Industries of Toronto, which makes electronic equipment). The second with Philips Industries of Toronto, which makes electronic equipment, has a manufacture communications as brass and iron hardware, nylon hosiery, grinding wheels and abrasives, products as brass and iron hardware, nylon hosiery, grinding wheels and abrasives, products as brass and iron hardware, nylon hosiery, grinding wheels and abrasives, announced recently, that it will build a plant in Brockville to manufacture communications and control equipment.

The second industrial area in Leeds (and the third in the Region) is Gananoque. This town had a gross value of production of about \$6,000,000 in 1950, produced by about 770 employees. Industry in Gananoque concentrates on the manufacture of metal components such as rivets and riveting equipment, truck axles and springs, metal fastenings for clothes, tanks, boilers and shovels.

Other manufacturing centres had a total gros value of production of about \$38,000,000 (1950). Separate totals are not given for the smaller towns where one or two industries supply most of the production.

Prescott is the largest manufacturing town in Grenville. It has a gross value of production of about \$3,500,000. There are several plants producing nylon and rayon goods, gloves, paper boxes and fishing rods. The newest plant, just opened by R.C.A. Victor, makes radios and electronic equipment.

Cardinal has a large mill owned by Canada Starch Limited with about 400 employees. Canadian Industries Limited is building a nylon plant at Maitland (near Brockville). Mille Roches (near Cornwall) has a small paper mill.

The Region has eight factories making milk products, ranging from wholesale receiving depots to complete plants producing evaporated milk, butter and milk powder. The two largest are those of Cow and Gate Limited, at Gananoque which can handle as much as 150,000 pounds of milk a day, and Nestle's Limited at Chesterville, each with more than 100 employees.

General Milk Products and Libby's have small plants at Brockville.

There are also smaller plants at Winchester, Alexandria, Easton's Corners and Kempt-

#### Agriculture

A large proportion of the income of the Upper St. Lawrence Region is derived from agriculture. Because of the character of the area, dairying is the predominant activity.

Except for Winchester Township in Dundas County, which is one of the richest agricultural districts in Ontario, the Region is divided between clay plains and an area of sandy soil. The "Thousand Islands" continue to rise in the south half of Leeds County in the form of islands of rock in the clay which is one of the best soils in the area. The north part of Leeds and western Grenville, with a strip of land along the St. Lawrence through Grenville, Dundas, Stormont and the northern portion of Glengarry counties is characteristically stony. The land is generally so level that drainage is a problem in sections of all five counties. Not only does slow run-off in the spring delay seeding, but, since the shallow tight soil in certain sections does not hold water, there is also a tendency to drought in the summer. Deprived of the moderating effects of the lakes, the area has a more extreme climate than the adjoining regions, with a normal range from 13 F. in January to 60 F. in July. Annual precipitation is heavy - the area has the fourth heaviest raintall and fifth heaviest snowfall of the Province.

Farms are large, tending to increase in size as operations are adjusted to soil conditions. In 1941, there were 11,369 occupied farms in the Region. In 1951 they had declined 15.7 per cent. to 9,581. Part of this decline was accountdist by abandoned farms, as total farm area decreased 6.3 per cent. from 1,470,594 acres to 1,378,126 acres in that period, but amalgamation of farms also took place. Total farm area contains a relatively small proportion of improved land, 47.2 per cent. for the Region, ranging from 72 per cent. in Dundas County, where the soil is highly productive when drainage is established and little uncleared land remains, to highly productive when drainage is established and little uncleared land remains, to 132.7 per cent. in Leeds, where average farm size is largest. This proportion declined by less than one per cent. in the intercensal period. Estimated average income per farm, about \$2,900 in 1950, is lower than the average for the Province, although income in Dundas County is well above.

The predominant activity of the whole area is dairying. This is the most intensified dairy region in the Province, although not the most productive. The emphasis on livestock farming in Leeds is indicated by the fact that there were 51,800 cattle at June 1st 1951, the highest number for the Region. Of these, 72.5 per cent. were milk cattle. In the Region as a whole, there were 187,500 cattle,

73 per cent. of which were kept mainly for milk production. There i. a market for fluid milk in Brockville and Cornwall and smaller towns in the area. Some milk goes to Montreal and Kingston, but the absence of large cities in the Region encourages the diversion of most of the fluid milk to cheese, butter and milk products. Sixty-seven per cent. of the value of dairy products from the Region was derived from cheese production in 1951. In 1953, cheddar cheese production in the Upper St. Lawrence Region was the highest in the Province in both volume and value and accounted for nearly 40 per cent. of the total provincial output. Stormont County was most productive in this respect, with Leeds following.

In most of the Region, the cheese industry is based on summer dairying. Milk is marketed to small local cheese factories operating only in summer. Costs are reduced by allowing the cows to dry in the fall and graze on forage in patches of deeper soil. In areas of deeper soil, as in Dundas County, reliable year round milk production is possible. Since milk is bulky and difficult to transport, it is made into cheese, a much easier product to handle, as close to the farms as possible. Larger factories, drawing fluid milk by truck from wider territories, are being built, however, and the number of establishments in the Region has declined. There were 132 butter and cheese factories in the Region in 1949, compared to 116 in 1951.

Another important use for fluid milk is in conversion to condensed, evaporated and powdered milk. With the decline in the export market for Canadian cheese, as discussed in the survey of the Quinte Region, from 63 million pounds in 1950 to 13 million pounds in 1953, condenseries have become more important as milk outlets. The problem of over-production of fluid milk in this area is not completely solved by diversion to condensed milk products, however, as their production has exceeded the market demands since the fall of 1952. The shift from cheese production to condensed milk production is not always easy, moreover, as condenseries, with more expensive plant equipment, require a year-round supply of fluid milk. Cheese production is sometimes affected detrimentally by the establishment of a condensery which draws from the milk shed of cheese factories, reducing cheese production in individual factories below the optimum level. Satisfactory arrangements have been made between condenseries and cheese factories in some areas to meet this difficulty.

Another major source of income is the production of dairy cattle for the United States market. As much as 20 to 30 per cent. of a dairy herd may be raised for sale. The united counties of Dundas, Stormont and Glengarry produced the first tuberculosis-free cows in the Province to meet import requirements of the United States. A high proportion of the cattle produced are pure-bred Holsteins, also because of the demands of the American market, since the tariff on export cattle to that country is reduced by \$40 for pure-bred stock.

Field crops in the Region are supplementary to the dairy industry. Hay, oats, mixed grains and fodder corn are the most important crops. Forty-four per cent. of the land under field crops is in hay, while the area imports feed grains to meet its deficiency in this respect. The Region also produced 26 per cent. of the buckwheat in the Province, as a cash crop in 1953. The predominance of bucktheat, a short-season crop suitable for wet land with problem drainage, reflects wheat, a short-season crop suitable for wet land with problem drainage, reflects wheat, a short-season crop suitable for wet land with problem drainage, reflects wheat, a short-season crop suitable for wet land with problem drainage, reflects wheat, a short-season crop suitable for wet land with problem drainage, reflects wheat, a short-season crop suitable for wet land with problem drainage, reflects wheat in a buckwheat flour mill near Montreal. Potatoes thrive in the light soils of Grenville and Leeds and are produced mainly for the Montreal market.

Experimental work is being conducted in all five counties in an effort to develop cash crops, such as soy beans and grain corn, of an early maturing type. The return from these crops is high enough to warrant iristalling tile under-drains to rectify bad drainage. In an area along the St. Lawrence in Glengarry County another crop specialty, fibre flax and flax seed, has been developed. The conditions of soil and high moisture supply suit its production. This is the leading fibre flax-producing area in Ontario.

Poultry and egg production, aimed at the Montreal market, provides some revenue, particularly in Stormont County, which accounts for a third of the hens and chickens of the Region. While a great many farms have a small poultry hens and chickens of the poultry and eggs are produced by a dozen large-scale operators. The swine industry supplements dairying in Dundas, Glengarry and Stormont.

Supplementary income is also derived from maple syrup products on some farms. The largest concentration of productive maple groves in the Province is in the north of Leeds and part of Grenville, where the rocky soil is better suited to maple trees than grass. There are some tree fruits, mainly apples, grown in Dundas and Grenville counties for the Ottawa and Montreal markets.

# FARM VALUE OF SELECTED AGRICULTURAL PRODUCTS UPPER ST. LAWRENCE REGION (in thousands of dollars)

						8	Region as a % of
Product	Dundas	Glengarry	Grenville	Leeds	Stormont	Region 1	Province
Field Crops - 195	3						100
Oats	385.8	897.3	399.5	789.4	655.8		
Mixed Grains	853.1	126.2	205.0	182.6	324.8		
Buckwheat	90.1	117.6	123.0	44.1		461.2	
Potatoes	80.5	42.1	146.6	162.5		475.4	
Corn for fodder	412.5	159.6	139.5	406.5	205.3	1,323.4	
Hay	923.0	1,445.0	867.0	1,994.0	900.0	6,129.0	6.5
Livestock on hand	- 1953						
Cattle	5,339.9	5,717.3	2,866.7	6945.1		26,157.0	6.6
Swine	499.6	458.6	187.7	378.3	349.4	1,873.6	4.1
Poultry on hand -	1952						
Total Poultry	294.4	269.6	190.7	221.0	439.7	1,415.4	6.0

Source: Ontario Department of Agriculture.

### THE DAIRY PRODUCTS INDUSTRY - 1951 -

	Fa	r and Cheese ctories No. of		VALUE	OF PRODUCTS	
County	No. of Est.	Employees	Butter \$'000	Cheese \$'000	Other (1) \$'000	Total \$'000
Dundas Glengarry	23 34	55, 106	160.4	1,567.8 1,783.0 495.7	353.6 693.6 53.0	1,921.4 2,637.0 640.1
Grenville Leeds Stormont	8 32 19	23 97 142	22.6	1,676.4 1,731.3	353.5 1,773.0	2,052.5 3,605.3
REGION	116	423	375.4	7,254.2	3,226.7	10,856.3
Region as Province	a. % 19.5	5.4	0.9	32.2	4.7	8.2

(1) including fluid milk and cream, and ice cream sold. The last is made in Stormont County only.

Source: Dominion Bureau of Statistics, Ottawa.

#### Mining

Mining is a relatively small industry in the Upper St. Lawrence River Region, the most important products being sand and gravel (\$993,358 in 1952) of which about one-half came from Grenville. Small quantities of amber mica, quartz crystals, limestone, marble, and quicklime were also mined. Dundas, unlike the other counties, has almost no commercial mining. The first iron smelter in Ontario was established at Lyndhurst (or Furnace Falls) near Gananoque about 1800, but like other pioneer enterprises of this sort it soon became bankrupt.

#### THE OTTAWA VALLEY REGION

#### Introduction

The Ottawa Valley Region is made up of the five counties of Carleton Lanark, Renfrew and the united counties of Prescott and Russell, all of which lie on the south shore of the river from which it takes its name. On the east, the Region is bounded by the Province of Quebec, on the south by the Upper St. Lawrence Region and on the west by the counties of Frontenac, Lennox and Addington and Hastings and the district of Nipissing.

Although the Ottawa River was the route by which furs from Machilimackinac and the west were carried to Montreal, the only settlement in the Region during the French regime was the Seigneury de Longueuil in and around L'Orignal. Champlain is known to have visited the Region as early as 1613 because, on June 7th of that year, while portaging from the Ottawa River to Muskrat Lake in Renfrew County, he lost an astrolabe, an instrument which was the forerunner of the modern sextant. The astrolabe was found 254 years later, in 1867. Traditionally, the Heroes of the Long Sault made their stand against the Iroquois at a spot near the present town of Hawkesbury, in Prescott County.

The earliest industry in the Region was lumbering, which soon gave way to agriculture. The timber which the pioneers of the Region found on their land grants was an asset for which there was a ready, local market. Throughout the Region, where everthere was water power, saw mills were built and around each mill a village developed. Gradually, as the land became denuded of trees, the small village saw mills ceased to operate, but not before many of the communities which they fostered had developed into thriving market towns.

The early settlement of the Ottawa Valley Region was not arranged under a colonization programme. The pioneers came individually or in family groups. A great many were Scotish immigrants and the influence of their thrift, intelligence and high standards of morality soon became apparent in all the Region's affairs. As well as the Scotch, the early pioneers included many Irish, a number of whom settled in Bytown where employment was available in the lumber mills or on the Rideau Canal, which was being built by military engineers during the early eighteen twenties.

Many of the pioneers were officers and men discharged when the British Army was reduced at the close of the Napoleonic Wars. These were given land grants, varying according to the recipient's rank, from one hundred to sixteen hundred acres. Many of these veterans, being pensioners, had small but regular incomes from which a modicum of cash was kept in circulation.

Except for L'Orignal, the oldest community in the Region is the town of Perth, founded about 1816. From its inception it was the manufacturing, trading and legal centre of the Region. It remained a miniature metropolis until long after Bytown had become Ottawa and was chosen as the national capital.

The Region is dotted with towns and villages, most of which started as saw or grist mill sites. Some, like Smith's Falls, Pembroke and Hawkesbury are thriving manufacturing and commercial centres; others, for example Vankleek Hill, Carleton Place and North Gower, have retained their character of market places for the surrounding country, while Richmond "the city of magnificent distances" is a romantic example of town planning that failed.

Ottawa, Ontario's third city and the only one in the Region, was originally called Bytown, after Colonel By, the officer commanding the detachment of military engineers stationed there while building the Rideau Canal. After a tumult-wous youth as a lumbering town, it gained maturity and dignity almost overnight, when chosen by Queen Victoria as the seat of government for the provinces of Upper and chosen by Queen Victoria with nearly a quarter of a million population, its lower Canada. Now a metropolis with nearly a quarter of a million population, its impressive public buildings and magnificent site make it one of the outstanding capitals of the world.

Also located within this Region are the Petawawa Military Camp, one of Canada's largest military training centres, the Atomic Energy Development at Chalk River and the Petawawa Forest Experiment Station.

#### Population

The estimated population of the Ottawa Valley Region was 407,000 in 1953, and the census population in 1951 387,807, 8.4 per cent. of Ontario's total. The intercensal increase between 1941-51, 16 per cent., was chiefly the result of increases in the urban population.

Although all five counties in the Ottawa Valley Region showed an intercensal gain between 1941 and 1951, three of them - Lanark, Prescott and Russell - have lost population during the past fifty years. In Prescott, the 1951 census showed a population of 25,576, a drop of 1,459 from the 27,035 shown in the census of 1901. In Lanark the loss was greater, the 1951 census showing 2,066 less than the 37,667 inhabitants listed in 1901, while Russell County, with a population of 17,666 in 1951, had lost 17,500 or roughly half its 1901 population.

As well as the change in numbers, there has been a change in the racial composition of the Region's inhabitants during the fifty years between 1901 and 1951. Out of a population of 229,117 in 1901, the people of British origin numbered 146,057 or 63.8 per cent. of the total. In 1951, although this group had grown to 220,447 it accounted for only 56.9 per cent. The group of French origin numbered 65,600 in 1901. Although their numbers had expanded to 118,814 by 1951, proportionally they had grown only from 28.6 per cent. to 30.6 per cent. Those of German origin numbered 11,969 and accounted for 5.2 per cent. of the population in 1901. By 1951, although their numbers had increased to 16,846 they had decreased to 4.3 per cent. of the total, while inhabitants of origins other than the three foregoing groups had risen numerically from 5,491 or 2.4 per cent. in 1901 to 31,800 or 8.2 per cent. in 1951. There was a notable increase of people of Polish and Dutch origins during the intercensal period 1941-51.

Metropolitan Ottawa (population 281,908 in 1951) increased 24.6 per cent. in population during the intercensal period 1941-51. The city proper increased only 17.5 per cent. over the same period, while the suburbs grew at a faster rate. Most spectacular among these is the town of Eastview which increased 73 per cent. during the same period. The town of Renfrew recorded an intercensal increase of 34 per cent., the fastest rate of growth among the smaller centres. The seven urban centres of over 5,000, together with the estimated 1953 population, are as follows: Ottawa (213,000), Eastview (15,800), Pembroke (13,300), Smith's Falls (8,500), Renfrew (7,900), Hawkesbury (7,500) and Perth (5,200).

#### Hydro Electricity

The potential power of the Ottawa River has been a boon to Ontario as a source of hydro-electric power in the postwar period. When the Hydro-Electric Power Commission began its development programme in 1945 it had only one generating station on the Ottawa River, Chats Falls, owned jointly with the Ottawa Valley Power Company. Since that time three large generating stations have been constructed by the Commission: Chenaux, Des Joachims, and the Otto Holden (Nipissing County). These stations, each with eight units, have a capacity of 120,000, 380,000 and 204,000 kilowatts, respectively. The combined capacity of Ontario Hydro's four plants is now 789,000 kilowatts, compared with 85,000 kilowatts—the capacity of the Chats Falls station—at the inception of the programme. The new stations were built to meet the unprecedented demand for electricity which occurred following the Second World War. The rapidity with which this output has been used emphasizes the necessity of developing additional sites. The alternate power sites on the Ottawa River allotted to Quebec have not been developed as yet, however. In addition to the generating stations owned by the Ontario Hydro, there is the Chaudiere Falls station (13,700 kilowatts) at Ottawa, operated by the Ottawa Hydro Commission.

#### Manufacturing

The greatest concentration of manufacturing in the Ottawa Valley Region is centred in Ottawa and its suburbs. Renfrew and Lanark counties together account for approximately one-third of the gross value of production of the Region. Each of these two counties accounts for approximately 16 per cent. of the \$155,567,000 produced by the Region in 1950. Prescott County has roughly one-half the volume of manufacturing of Lanark, while Russell County has almost no manufacturing.

Fourteen per cent. of the total labour force was engaged in manufacturing in 1951, the lowest proportion in any region of the Province, which indicates the secondary position of manufacturing compared to the functions of government. In 1953 there were an estimated 21,400 employees in manufacturing, which places the Region in seventh place among the regions of the Province, but in terms of average wages and salaries the Region ranked among the lowest.

Although the 268 factories in the city of Ottawa use approximately one-half of the Region's manufacturing employees (9,800 in 1950), the total production (\$80,886,000) is comparable to that of Niagara Falls, a much smaller city. Ottawa owes its large population to the many civil servants employed by the Federal Government, and not to manufacturing or trade. Classified civil servants totalled 32,689 in 1952, exclusive of casual labourers, members of the Royal Canadian Mounted Police, and the National Research Council. This last group had more than 1,000 employees at Ottawa.

The largest number of employees is found in the printing and publishing industry which employed approximately 2,800 in 1950 and printed or published material valued at \$17,229,000. Among these firms are the British American Bank Note Company and the Canadian Bank Note Company, with a total of some 800 employees, who produce all the postage stamps, paper money, and bond certificates required by the Post Office and the Bank of Canada. Business forms are printed by R.L. Crain Limited, with about 450 employees. There are also several smaller firms which do job printing, lithographing, and stereotyping.

The second largest number of employees is found in the food and beverage industries (2,639). Many of these industries are dairies and bakeries with a purely local demand. The principal exceptions are Brading's and O'Keefe's breweries which have a combined working force of about 500. Borden's Limited employ more than 100 in making cream cheese, in addition to more than 300 employees in their dairy.

Ottawa's first factories were saw mills, established about 1830. These have lost some of their relative importance owing to the growth of other manufacturing and the removal of the forests, but several small plants still manufacture large quantities of boards, moulding, doors, window sashes, boxes and barrels, worth about \$6,000,000 (1950).

The E.B. Eddy Company is the largest private employer of labour in Ottawa with more than 600 employees. It produces pulp, various kinds of papers, bags and boxes. Other secondary manufacturers (i.e. those that do not manufacture paper) produce paper bags, boxes, cups, waxed paper, carbon paper and specialty paper products.

Iron and steel products have approximately the same value as wood products. The largest metal fabricator is Beach Limited with about 400 employees, producing gas and electric stoves, furnaces and hot water heaters. There are also several smaller plants which build machinery for paper mills, printing presses, and cast iron, brass and bronze. In addition, the city has many small plants which produce a wide range of goods such as paint, cosmetics, sports clothes, wire cloth for paper mills, aircraft and surveying instruments, cleaning materials, and collapsible metal tubes.

Manufacturing in Pembroke, Renfrew County, is concentrated on wood products, textiles, and metal fabrication, a pattern which is typical of the whole Region. Wood products are represented by: the Consolidated Paper Company which employs some 350 in its large saw mill; the Pembroke Shook Company with 245 employees making baskets and boxes; the Canadian Splint and Lumber Company which makes match sticks among other products; the Eddy Match Company; and the Canada Veneer Company, plywoods. The last two companies have less than 100 employees each. Metal Company, plywoods is represented by Superior Electric Limited, which makes irons, toasters, fabrication is represented by Superior Electric Limited, which makes irons, toasters, stoves, and by the Steel Equipment Company which produces steel shelves, filing cabinets, lockers, and office furniture. The former has approximately 100 employees and the latter about 300. Wool cloth for suits is made by the Barrymore Cloth Company.

value of production of \$6,271,000 (1950). It has two woollen mills with a total of 300 employees (wool cloth, overcoat material, and worsted). The largest single manufacturer is Renfrew Electrical and Refrigeration Limited, which employs about 200 in the production of heaters, irons, toasters, and refrigerators. In addition, a local plant produces window shade rollers.

Arnprior has the Kenwood Mills Limited which produces blankets and woollen pulp for paper mills. This firm employs about 250. The Canadian Public Booth Company with more than 150 employees, produces filing cabinets and telephone booths. There is also a saw mill and sash factory here.

A Crown corporation, Atomic Energy of Canada Limited, has taken over the National Research Council atomic energy laboratory and plant, at Chalk River in the north of Renfrew, which has more than 1,000 employees. Regular shipments of radio-active isotopes are made to medical and industrial laboratories in several countries, including the United States. The plant is being expanded at the present time at a cost estimated at \$30,000,000.

The Canadian International Paper Company owns the largest plant in Prescott County, at Hawkesbury, with more than 700 employees. Industrial Cellulose Research Limited, also at Hawkesbury, is the experimental division of the paper company. It has approximately 100 employees, including physicists and chemists who study paper-making technology and plastics. The laboratory has a small found-rinier (paper-making) machine and a rayon plant to test experiments on a commercial scale. Hawkesbury also has smaller plants producing women's clothing and dressed lumber.

Smith's Falls largest and oldest plant (established 1839) is that of Frost and Wood Limited, a division of Cockshutt Farm Equipment Limited, with some 650 employees who produce harvesting equipment. The only other large manufacturer is the Smith's Falls Malleable Castings Company with approximately 100 employees.

Perth, in Lanark County, produces woollen cloth, shoes, socks, and pharmaceuticals with a gross value of \$6,974,000 (1950).

Carleton Place (which is also in Lanark, not Carleton) has Findlay's Foundry, makers of furnaces, stoves, and oil heaters as its largest employer with some 400 employees. The Renfrew Woollen Mills Limited and Bates and Innes Limited, with a total of 400 employees, produce worsteds, wool cloth, and blankets. Textile mills are also located in smaller centres, including Almonte and Lanark.

Most of the new investment in the Region for factories and laboratories has been expended by the National Research Council for the plant at Chalk River. However, the Canadian International Paper Company has expanded and remodelled its Hawkesbury plant. The R.C.A. Victor Company is building a plant at Smith's Falls and the International Latex Corporation has constructed a factory at Arnprior. A total of six firms established new plants in the Region in 1953.

#### Agriculture

The projection of the Frontenac Axis of the Canadian Shield on the west and the Ottawa River on the east, provide the practical limits to agriculture in the Ottawa Valley. A line drawn through Pembroke, Renfrew, Carleton Place and Smith's Falls roughly demarcates the margin between the sands and clays of eastern Ontario and the precambrian rock structure of the Canadian Shield.

The entire Region has a primary dairy basis but variation in soil and rainfall, plus the pull of markets in Ottawa and Montreal, provide intraregional differences. Occupied farmland constitutes 60 per cent. of the total land area, the large portions of Renfrew and Lanark within the Shield having a downward effect on this ratio. Of the total farmland, 51 per cent. is improved, of which 68 per cent. is in crops and 27 per cent. in pasture. Of the field crop area, 55 per cent. was devoted to hay production in 1952. This compares with 38 per cent. in hay in the Blue Water Region, Ontario's most productive in terms of total estimated net farm income, and is indicative of the predominant role played by livestock, principally dairy cattle, throughout the Region.

Two clay plains, one stretching from Prescott up the Ottawa Valley to Pembroke, and one the northern extension in Russell and Prescott of the clays of the St. Lawrence Region, provide the most fertile soils. A band of wet, sandy soil stretches east and west between the two clays in Prescott, Russell and Carleton. That portion of Lanark County outside the Shield plus the western section of Carleton have a bedrock formation of limestone covered by thin sandy soils. In northern Renfrew, above Pembroke, a sand plain extends from the termination of the Ottawa Valley clay into the Shield.

The growing season throughout the Region declines from 150-180 days in the south-east to 100-120 in the extreme north-west. Rainfall is about the Ontario norm of 30-35 inches and is fairly evenly distributed, except in Prescott and Russell where it is somewhat heavier.

General farming persists throughout the Region, with a gradual shift from an exclusive dairy emphasis in the south-east to a more extensive production of beef cattle and seed grains in the north.

The southern sections of Russell and Prescott, with grey and pink clays, are part of the dairy regions of the Montreal milk shed. One of the most productive sections in the Province, the livestock density is the highest in Ontario. Along with cattle, horses, sheep, pigs and poultry are in great abundance. There is very little unimproved land, a high degree of mechanization and excellent market outlets. Fresh milk goes to Montreal while condenseries and chaese factories absorb the rest of the whole milk produced.

The sands of Prescott and Russell have a varying quality, the finer sands of the eastern extremity being more fertile and easily drained than the coarser, wetter sands to the west. The fine sands support dairying plus some crops of flax and potatoes. The coarser sands have an extreme drainage problem and lack fertility. An attempt at dairying supported by oats and barley is now being superseded by a reforestation programme.

The clay plain adjacent to the Ottawa River occupies the greater part of the arable areas of the Region. However, for convenience, and because of a distinct variation in the soil, the town of Richmond may be considered to divide the wetter south from the dryer and more easily drained north. Below Ottawa, in Prescott and Russell, the clays have a higher acid content and an impervious quality which retains the moisture. Again, general farming prevails with greater emphasis on milk production within the Ottawa milk shed. Farther east, the greater quantity of milk is processed into cheese. In the Ottawa district, almost all of the land is cleared and 30 per cent. is in pasture.

Above Richmond, the clay is more pervious and the lighter rainfall permits early spring seeding. Seed grains with alfalfa either for hay or seed are grown in quantity along with oats and barley.

Beef herds have been for a time the predominant type of cattle raised in the northern part of the Region but a general trend to registered dairy herds with declining emphasis on beef is in process. Census statistics are difficult to interpret in this regard because of improper distinctions between dairy and beef cattle in earlier counts. The Pembroke area, however, shows a marked trend in this direction.

The overall significance of seed grains can be seen as pasturage occupies only from 7-8 per cent. of the cleared land as compared to 20-30 per cent. in the southern dairy district.

The limestone plain that extends into Lanark and Carleton from the south, except for deeper pockets, is covered by a shallow soil and technically, is agriculturally poor. However, from 80-90 per cent. of the land is occupied by farms of about 200 acres, twice the size of those in the clay areas. Only 40 per cent. of this land is improved and 75 per cent. of this is in crops, mostly hay and mixed of this land is improved land is in pasture, indicating a livestock grains. About a third of the unimproved land is in pasture, indicating a livestock grains. However, animal units per acre are well below the average of the more easterly counties. Summer dairying is the rule as in Leeds, where the cows are allowed to go dry and graze during the winter on areas of deeper soil. Local cheese allowed to go dry and graze during the winter on areas of deeper soil. In a factories and condenseries absorb most of the produce. Beef cattle are still in

prominence in the remote areas.

. 27/50

Hogs and poultry are kept, although not in abundance, while subsidiary income is derived from the maple sugar and syrup industry.

In south-east Carleton a small area of fertile clays and silt supports a specialty crop belt. On the edge of the Ottawa milk shed, a great deal of the milk produced is converted into cheese and butter. Near Osgoode on the northern border of this belt, fruits and vegetables supplying the Ottawa market, along with potatoes, are grown intensively.

In the marginal highland portions of the Shield, falling within this Region, a subsistence agriculture occupies the small pockets offarming. Beef and dairy products, along with potatoes where the depth of sand permits, are the main sources of income.

This Region illustrates the general trend towards larger farms, increasing mechanization and decreasing labour supply. A vast programme of rural electrification has resulted in a declining use of gasoline engines for power while the use of combines has increased twenty-five times in the intercensal period. The overall importance of this Region in Ontario's agricultural economy, however, must not be overestimated. The estimated average income per occupied farm stood at \$2,725 in 1950, eleventh of nineteen Provincial Regions and ninth in Southern Ontario. Carleton County ranks highest at \$3,254, or a little above the Provincial average of \$3,023, while Renfrew at \$2,057, has the second lowest average in Southern Ontario.

#### Mining

Mining in the Ottawa Valley Region is a relatively small industry, the value of minerals produced (\$7,267,469 in 1952) being only 1.6 per cent. of the Provincial total. The greatest part (\$4,812,368 in 1952, compared to \$3,618,200 in 1951) of the Region's output was accounted for by Dominion Magnesium Limited with several hundred employees at its quarry and foundry at Haley, in Renfrew. The foundry converts calcium and magnesium (separate totals cannot be published) into ingots and light castings for aircraft. This mine has been the major producer of calcium and magnesium metals in Canada since 1941. Also in Renfrew is the only graphite mine in Canada, the Black Donald at Calabogie.

Most of the Region's limestone quarrying (692,546 tons worth \$844,644) is carried on in Carleton and Prescott. Sandstone production was small (1,675 tons) although it has a unique endorsement—it was used for the Federal Parliament buildings.

### THE DAIRY PRODUCTS INDUSTRY IN THE OTTAWA VALLEY REGION - 1951 -

	FA	CTORIES		VALUE OF	PRODUCTS		
County	No. of Est.	No. of Employees	Butter \$'000	Cheese \$'000	Other (1) \$'000	Total \$'000	
Carleton Lanark Prescott Renfrew Russell	25 18 143 11 23	903 118 75 130 53	468.0 1,633.8 298.1 2,034.7 361.4	733.8 508.2 1,946.3 45.0 1,286.7	9,840.4 1,158.8 78.2 670.2 88.3	11,042.2 3,300.8 2,322.6 2,749.9 1,736.4	
REGION Region as a	120	1,279	4,796.0	4,520.0	11,835.9	21,151.9	
% of Province	20.2	16.3	11.4	20.1	17.4	15.9	

<sup>(1)</sup> Including fluid milk and cream, and ice cream sold. Source: Dominion Bureau of Statistics

BUTTER AND CHEESE

# VALUE OF SELECTED AGRICULTURAL PRODUCTS OTTAWA VALLEY REGION (in thousands of dollars)

Products FIELD CROPS - 1953	Carleton	Lanark	Prescot	t Renfrew	Russell		Region As a % of Ontario
Oats Barley Mixed Grains Buckwheat Cor. for fodder Potatoes Hay LIVESTOCK ON HAND - 1953	1,524.5 110.4 714.1 100.5 316.9 248.5 2,268.0	597.0 83.0 569.8 29.1 207.3 75.3 1,659.0	152.7	232.8	175.6 17.9 205.6 100.1	586.6 2,020.8 275.3 1,007.2	
Cattle Swine Sheep and Lambs POULTRY ON HAND - 1952		312.5	5,062.8 606.6 13.2		5,753.4 389.5 23.4	36,122.0 2,608.9 848.1	9.1 5.8 8.6
Total Poultry Hens and Chickens	442.0 378.2	253.6 221.6	261.7 232.8	333.6 299.5		1,508.7	6.4 6.5

Source: Ontario Department of Agriculture

#### THE HIGHLANDS REGION

#### Introduction

The Highlands Region is composed of the provisional county of Haliburton and the districts of Muskoka, Parry Sound and Nipissing. It is bounded on the north by the district of Timiskaming, on the east by Renfrew County and the Ottawa River, on the south by the counties of Hastings, Peterborough, Victoria, Ontario and Simcoe and on the west by Georgian Bay.

For well over two centuries after Champlain traversed the Region from the Ottawa River to Georgian Bay in 1615, the area had no white inhabitants, except the personnel of the fur trading post and fort established by the French on Lake Nipissing. Systematic settlement of the Region began with the enactment of the Free Grants Act in 1868, whereby tracts of 200 acres were given to heads of families and 100 acres to all settlers eighteen years of age or over. The Act was widely advertised and attracted considerable attention abroad, particularly in the British Isles.

The early settlers bound for Haliburton County, in the eastern part of the Region, travelled up the Bobcaygeon Road from Lake Ontario. However, the most popular part of the area was the Muskoka District, which could be reached most conveniently by travelling by rail from Toronto to Belle Ewart. From Belle Ewart a steamer ran to Washago where transfer was made to the stage line for Gravenhurst, then known as McCabis Bay. At McCabis Bay a steamer could be boarded for Bracebridge. From Bracebridge a stage line ran to Port Sydney and from there yet another steamer would take the traveller to Huntsville. The remainder of the journey would be made either by stage or on foot.

There was still another route into the Region from the west whereby the settler after travelling by train from Toronto to Collingwood, boarded a steamer for Parry Sound. From Parry Sound, colonization roads led into the interior.

Although life in the settlements was rugged and the pioneers found many discomforts, they did not encounter great hardships like the ones that had been overcome by earlier pioneers in the Quirte, Upper St. Lawrence and Niagram Regions. From the time settlement started, lumbering was the most important industry. Thus the pioneer was assured of some income as he proceeded with the work of clearing his land.

After 1877, the Beardmore tannery at Bracebridge was in constant need of hemlock bark for tanbark and even at that early date in the history of the Region, the tourist trade was an important industry, offering a market for farm and garden

produce, as well as part-time employment.

The old French trading route from the far west passed through the Nipissing lowland between Georgian Bay and the Ottawa River. However, the fort and trading post on Lake Nipissing had disappeared long before the C.P.R., building from Mattawa to Sudbury, selected the flat shore of the lake and thereby started the city of North Bay. The next largest community in Nipissing District is the town of Mattawa, with 3,200 inhabitants. It grew up around the old trading post of Mattawa House and had become an important lumbering centre by 1855. The Hydro Electric development at Des Joachims forms a lake which stretches for fifty miles to the east of Mattawa, while another large dam, a few miles upstream provides additional water storage.

#### Population

The Highlands Region is the most sparsely populated area in Southern Ontario with a population density of only 7.5 persons per square mile and a total population of 113,000 in 1953. On the average, sixty-two in every one hundred people live in rural areas. The only exception is Nipissing District, where the urban population exceeds the rural. The population of the Region was 110,928 in 1951, an increase of 8 per cent. during the intercensal period. The increase was evident in the urban areas where a gain of 14.9 per cent. was recorded, but the rural population increased only 4.5 per cent. over this period.

The change in the median age from 24.6 to 26.3 during the intercensal period indicates a change in the age composition of the population. This has been caused by the migration of younger people to other areas. There were, for example 10,938 people in the 10-14 age group in 1941, but in the 20-24 age group ten years later, there were only 7,454, a decrease of 32 per cent. In spite of a high birth rate, 27.4 per thousand people, the Region has recorded only a moderate increase in population as a result of this exodus. The District of Parry Sound sustained a loss of 9 per cent. during the intercensal period, but the population of Nipissing increased 16.6 per cent., the highest of the four districts.

North Bay, the Region's only city and its largest urban centre, had an estimated population of 19,100 in 1953. Two other centres had a population in excess of 5,000: Sturgeon Falls (5,400) and Parry Sound (5,200). The population of Parry Sound, however, declined about 10 per cent. in the intercensal period between 1941-51.

#### Tourist Industry

The dominant economic activity in the Highlands Region is catering to the wants of tourists and vacation guests. There are approximately 1,550 tourist establishments, including hotels, resorts and outfitter's camps, in the area, 20 per cent. of the provincial total. In spite of the seasonal nature of the trade, it provides year-round support for about 70 per cent. of the operators, most of whom operate establishments accommodating thirty to fifty visitors. For the remainder, the tourist trade is combined with other activity. Large establishments accommodating from 200 to 350 visitors are operated intensively for a very short period by their owners and managers, who are usually engaged in other activity outside the area. Smaller establishments comprising one to ten rental units often consist of a few cottages on a corner of a farm or behind a gas station which provides part of the operator's income. Even here, however, catering to the tourist trade is usually the primary occupation, only supplemented by other activity.

The physical characteristics of the Region and its proximity to urban areas provide the basis for the tourist trade. A part of the Laurentian Shield, its rocky hills, forests and scenic lakes make it the natural resort area for Ontario and American cities to the south. The Muskoka Lakes were exploited as a vacation area at the beginning of the twentieth century. They were made accessible to city people by the building of railways, and most of the old lumber settlements became resort towns. At present, most visitors come by highways through the small towns of Haliburton, Huntsville, Gravenhurst, Bracebridge, Burks Falls, Sundridge and Parry Sound.

fished and hunted through varying seasons. Angling for many fish begins in May, and deer hunting extends into November.

The operating season for most tourist establishments is from June to September, although some resorts and outfitter's camps remain open from May to November. A few, supported by winter sports such as skiing around Huntsville, are operated all year. The Highlands Region offers accommodation for about 52,000 visitors at one time in tourist and out-fitter's camps and hotels. During the summer months, this is filled to capacity, while a sample of resorts operating in February 1953 showed 16 per cent. occupancy. In October 1952, hotels sampled were operating at 74 per cent. capacity and in April 1953 at 62 per cent.

The importance of the tourist industry in the Region is felt in industries dependent on this activity. These may be classified as primary holiday trades: the direct consumptive trades of entertainment and sport and personal services, and secondary holiday trades: building, decorating and construction, gasoline, water and electricity, transport and communication, and the distributive trades. These services are necessary in daily life, but the man on holiday consumes more of them. The extent to which the holiday trades are dependent on the tourist trade can be estimated by a comparison of this type of employment in the Highlands Region and in the rest of the Province. The 1951 Census shows 10.1 per cent. of the population of the Region occupied in service trades, compared with 9.6 per cent. for the Province. In spite of the small margin, this difference is significant because of the lack of large cities, where the service trades are normally centred, in the area. There is 8.7 per cent. of the population employed in personal services, compared to 6.8 per cent. in Ontario. This includes workers, mostly drawn from outside the area, employed for the summer season only.

Among the secondary holiday trades, 13.2 per cent. of the population, compared to 7.4 per cent., are employed in transportation and communication. The presence of North Bay, a railway centre, in the Region is a factor in this comparison. In construction, 8.3 per cent. are employed, compared to 5.7 per cent. for the Province as a whole. Agriculture, which may also be classified as a secondary holiday trade, is not affected directly by the tourist trade, since the Region does not produce food enough to meet its own needs.

The Census also shows 10 per cent. of the population, compared with 8.3 per cent. for the Province, occupied as proprietors and managers. These number 3,756. Since there are 1,550 tourist establishments in the area, it may be assumed that more than half of the proprietors and managers are engaged directly in the tourist industry.

#### Algonquin Park

A provincial park of 2,700 square miles of forest and lake about 200 miles north of Toronto, Algonquin Park is the highest and most rugged part of the Highlands Region. Altitudes vary from 1,200 to 1,900 feet above sea level. Taking up parts of the District of Nipissing and the County of Haliburton, the Park is crossed in the southwest by Highway No. 60, and by the Canadian National and Canadian Pacific Railways.

The Park area was a hunting ground in the early 17th century for the Algonquin Indians, who supplied French traders with furs. Intensive explorations of the area were made from 1818 to 1868 by British Army officers seeking transportation routes to bases on Lake Huron and Lake Superior, and by government and private surveyors. Concurrently, lumber interests were pushing further up the Ottawa and its tributaries in search of more red and white pine. The pathways to the Park were soon cleaned out of the best timber. Settlers moved in after the lumbermen and it was expected that once the forest was cleared, the area would be valuable farming land. Settlers in the southeast established "depot" farms in patches of fertile soil and ran them in conjunction with work in the lumber camps. When the lumber companies stopped cutting and the railways were built, the depot farms lost their market for food and fodder grown for the camps.

A Government scheme for settling the tract was relinquished during the 1880's as the lack of fertile soil became apparent and the suggestion was

advanced that a "National Forest and Park" be established. An area would be set aside for "the preservation and maintainance of the natural forest", to protect "the head-waters and the tributaries of the Muskoka, Petawawa, Bonnechere, and Madawaska Rivers," and to preserve fur bearing animals, some of which had been hunted so extensively that extermination appeared likely. Control of the region was to prevent a recurrence of the cycle begun in many parts of the Province when land was denuded of trees by new settlers and lumbermen, thus reducing the water supply.

The Algonquin National Park Act was passed by the legislative assembly of the Province of Ontario in 1893. By this Act, the territory lying near and enclosing the headwaters of the Muskoka, Madawaska, Amable du Fond, Petawawa and South Rivers was set apart "as a public park and forest reservation, fish and game preserve, health resort and pleasure ground of the benefit, advantage and enjoyment of the people of the Province." Since 1893, eleven full townships and large sections of eight others were added, almost doubling the original area.

The main use of the Park at present is for recreational purposes. Travel permits issued in 1952 show over 197,000 persons admitted to the Park. There are about 400 private summer homes within its limits, together with boys' and girls' camps and tourist establishments. Summer homes and tourist camps are restricted to certain areas in the southern portion of the Park, the remainder being retained as a "wilderness area" free from settlement and accessible by canoe.

A sanctuary for wildlife, the Park has played an important part in helping to keep fisher, marten and beaver from disappearing in eastern Ontario. The increase of valuable fur bearing animals in the Park has resulted in an overflow of these animals into the surrounding area. Some of the best trapping ground in Ontario is in the regions bordering the Park. The Ontario Government has set up a system of zoned trapping along the Park boundaries in the Huntsville and North Bay districts.

There are a variety of game fish in the Park. As part of its scheme for managing angling waters, the Department of Lands and Forests has instituted a plan for resting certain heavily fished lakes. The lakes are chosen in pairs, with two lakes of each pair in the same area. One lake of each pair is closed in alternate years, so that there is always an open lake in each area every year.

Algonquin Park also provides a laboratory for study and research in natural science. Headquarters for fisheries research for the Province as a whole is at the Fish Laboratory on Opeonogo Lake, the largest lake in the Park. There is also a wildlife research centre on Lake of Two Rivers. Research facilities in the Park have also been used by other institutions. Forestry practice camps were held in the Park bu the University of Toronto until 1935. Today, commercial logging, restricted to undeveloped areas away from waterways, is carried on in the Park.

#### Transportation

The strategic position of North Bay on the neck of land separating Northern Ontario from Southern Ontario, separating the mining and wood products of the north from the industrial and agricultural south, has led to a channelling of commerce through the city. It has become the northern headquarters for numerous commercial and distributing firms. North Bay is a major divisional point for three main railway lines, and a terminal for Trans-Canada Air Lines. The railways alone employ 2,100 persons, 31 per cent. of the labour force, an indication of the relative importance of transportation in the local economy.

North Bay is the head office and main terminal of the Ontario Northland Railway. The Timiskaming and Northern Ontario Railway, as it was called prior to 1946, was begun in 1902 as a provincial venture in response to demands for rail transportation to the north-eastern part of the Province. Conceived originally as a means of transportation for settlers at the head of Lake Timiskaming and to promote settlement of large and fertile areas of land in the Clay Belt, it went on, through the discovery of valuable minerals, to play a major role in developing Ontario's mineral wealth. The discovery of silver at Cobalt in 1903 was made during the construction of the railway. In the years that followed the railway became instrumental in establishing forest industries by providing direct transportation south and by linking with the National Transcontinental Railway at Cochrane.

The first section of the line, from North Bay to New Liskeard, was completed in 1904, the extension to Cochrane in 1908, and the lob mile span to Moosonee, on James Bay, in 1932. The Nipissing Central Railway, ar electric line, was purchased in 1911 and extended to Noranda, Quebec. At present the commission operates a total of 726 miles of track. Future plans call for a new repair shopin North Bay and a subsidiary shop at Cochrane. Steam locomotives are being replaced with diesel-electric locomotives and it is expected that this programme will be completed in 1955.

#### FREIGHT TONNAGES HANDLED BY ONTARIO NORTHLAND RAILWAY IN 1952

	Thousand Tons
Forest Products	962
Agricultural Products	46
Animals and Animal Products	14
Manufactures and Miscellaneous	548
Newsprint	444
Coal and Coke	330
Iron Ores and Concentrates (pyrites)	232
Copper Ores and Concentrates	9
Other Ores and Concentrates (silver, cobalt, etc.)	189
Sand, Gravel and Crushed Rock	1.6
Asphalt	10
Salt	5
Other Mine Products (asbestos, sulphur)	134
Source: Ontario Northland Railway	

#### Manufacturing

The relative isolation of the Highlands Region from other populous areas of Ontario together with the limited possibilities of agricultural development, have resulted in a limited industrial growth. The per capita gross value of manufacturing production was \$355.70 in 1950, the lowest among the regions of the Province.

In the main, only manufacturing industries of the primary type, suited to consume the forest and mineral raw materials available in the north, have flourished. The major products are lumber, paper corrugating board, and mining equipment. Numerous saw mills in northern Parry Sound District and along the banks of the Mattawa River cut lumber from the coniferous forests. One of the oldest paper mills in Canada, at Sturgeon Falls, with about 300 employees manufactures corrugating board. Four companies in North Bay manufacture mining equipment. Two cooperage mills at Sturgeon Falls make barrel staves. A brush company, one of the largest manufacturing establishments in the Region, is located at Gravenhurst. Textiles are also represented, with a garment factory in Sturgeon Falls and a woollen mill at Bracebridge. Lumber mills and boat works are located in North Bay, Parry Sound, Gravenhurst and Bracebridge.

Explosives are manufactured at the village of Nobel in Parry Sound District. The history of the Nobel works goes back to 1912 when the plant was constructed to service the mining area to the north, and provide explosives for the proposed canal to link Georgian Bay with the Ottawa River. The canal was never built. Despite the initial setback, the explosives have found a ready market for mining, highway construction projects, and of course military requirements. At present the plant has approximately 350 employees.

Approximately one-fifth of the labour force in the Highlands Region is engaged in manufacturing, compared to 11.3 per cent. in agriculture, which suggests the relative importance of manufacturing as a source of income within the Region. In 1953 there were an estimated 4,900 employees with an estimated annual income of \$12.2 million. A study of the monthly employment index during 1953 shows income of \$12.2 million. A study of the monthly employment index during 1953 shows income of \$12.2 million. Despite variations there has been a steady but modest increment over the past three years.

#### Agriculture

Lying entirely within the Canadian Shield, the Highlands Region has the lowest estimated income per farm of any Region in Southern Ontario. Surpassed by the tourist trade, mining and manufacturing, agriculture ranks a poor and steadily decling fourth, not only relatively but absolutely.

Over the intercensal period 1941-1951, the number of occupied farms declined from 5,337 to 3,949. Total farm area fell by 0.2 per cent. or from 9.3 per cent to 9.1 per cent. of the Region's total area. Improved land, only 29.9 per cent. of all farm land in 1941 declined by 31,419 acres to 26.3 per cent., while acreage devoted to field crops declined by 32,406 acres.

The explanation of the decline in farm land lies in the historical process so visible in this area. In the first few decades of this century, lumbering was the prime industry. As the Region was cleared, farms followed. However, most of these farms have lasted little more than a decade, abandoned when the soil proved either too sandy or too shallow.

A great many of the farms in the area may be classed as subsistence or part-time with the owners gaining a subsidiary and sometimes substantial income from outside work. The most outstanding example is the tourist industry where the farmer profits by cottage building, renting and servicing. Farm products include dairy products, poultry, eggs and some vegetables. These supply a good part of local winter needs, but with the influx of tourists in the summer, the Region again becomes dependent on outside sources.

Agriculture, where it is significant, is centered in small clusters where the depth of soil permits. These areas, however, are few and far between. Good examples are to be found in northern Parry Sound and northern Nipissing near North Bay in the Mattawan area. Dairy products, poultry and some vegetables for nearby markets are the main sources of income.

### VALUE OF SELECTED AGRICULTURAL PRODUCTS HIGHLANDS REGION

Products	Haliburton	Muskoka	Nipissing	Parry Sound	Region	Region As a % of Ontario
Livestock on Hand-1953 Cattle	521.1	1,143.0	1,892.1	2,291.9	5,848.1	1.5
Field Crops - 1953 Oats	80.1	222.4	435.8	542.3	1,280.6	2.6
Mixed Grains	4.1	11.5	122.3	89.6	227.5	0.6
Potatoes Hay	24.7	59.0 560.0	1,380.0	262.1 1,264.0	518.5	4.1 3.6
Poultry on Hand - 1952 Total Poultry	23.1	53.0	63.7	109.5	249.3	1.1

Source: Ontario Department of Agriculture

#### Forestry

The area of productive forest land in the Highlands Region varies between three-quarters and four-fifths of the total land area. Contrary to popular belief, there are more stands of hardwood trees than conifers and a greater volume of available hardwood than softwood, a condition particularly true in the southern sections of the Region where fire and overcutting have reduced the proportion of coniferous forest. The volume of conifer growing stock in Muskoka and Parry Sound, for example, is less than one-quarter of the total growing stock. Much of the remaining softwood, particularly white and red pine which are the principal saw logs, is immature. The limiting of softwood due to this depletion has resulted in the utilization of less desirable species such as maple and birch. The trend will probably continue in this direction as the actual cut of conifers has exceeded the allowable amount on a sustained yield basis. According to the Forest Resources Inventory (1953), a comparison of the annual allowable cut with the actual utilization of timber on Crown lands in Parry Sound and Muskoka, shows a heavy overcut in

white and red pine, hemlock, the two spruces and balsam fir. In Nipissing District, one of the major white pine areas of the Province, stands have been overcut. The difficulty of obtaining mature white and red pine of saw-log size has meant a decline in the lumbering industry of the Region, and since conifers generally require a century of growth before they are considered mature, it appears inevitable that the industry will continue to decline until present growing stock matures.

#### Mining

Although the Highlands Region is adjacent to the great mining areas of the north its mineral production (\$41,710 in 1952) is valued at less than that of any other Region in Ontario. Sand and gravel had the greatest value (\$146,707), followed by mica (\$106,943), limestone (\$64,000), and clay products (\$74,350). About two-thirds of the total production came from Nipissing. Despite the limited mineral production in the Region at present, the discovery of uranium ore in Nipissing and the possible existence of iron ore in Parry Sound District, may lead to an extensive mining development, depending on the quantity and quality of the deposits.

#### THE CLAY BELT REGION

#### Introduction

The Clay Belt Region is made up of the districts of Cochrane and Timiskaming. It is bounded on the east by the Province of Quebec, on the south by the districts of Nipissing, Sudbury and Algoma, on the west by Thunder Bay District and on the north by the Patricia portion of Kenora District and the south shore of James Bay.

Although overshadowed by more recent developments in mining and forestry, the fur trade is still an important and lucrative industry in this Region. Moosonee, the community which has grown up around the trading post established by the Hudson's Bay Company at the mouth of the Moose River in 1671, is the oldest white settlement in Ontario. It is also the Province's only salt water port and the seat of the Diocese of Moosonee.

Because Moose Factory and its other posts on the Bay were also seaports, the Hudson's Bay Company was able to transport trade goods directly from Europe to the heart of the fur trading region, without costly trans-shipment. The two Company ships which came out each summer from Stromness, in Scotland, laden with iron kettles, firearms, cloth and trinkets, returned packed to the hatches with furs. Nowadays, the furs from the Region do not reach the world's markets by way of that little Orkney Island port. Instead, they go south by rail to Montreal. Except for sufficient vegetables to provide its isolated employees with a varied diet, the Hudson's Bay Company did not encourage agriculture. Its sole purpose was to obtain furs from the Indians and, therefore, no attempt was made to develop or colonize the vast territory which the Company controlled. Consequently, when the district passed from the Hudson's Bay Company to Canada, it was an almost unknown land. Subsequently the land which now comprises northern Cochrane District was awarded to the Province in 1878.

#### Population

The Clay Belt Region has at present a population of only 134,000 (1953), approximately comparable to that of greater London (Ontario). Broadly speaking, the railways, particularly the Ontario Northland, have determined the pattern of settlement. Almost all the centres of population are situated on or near the railway. Shortly after the Ontario Northland was initiated, it became evident that mining and not agriculture was to be paramount in the economy, and the railway built branch lines to the more promising gold and silver discoveries. The discovery of gold at Porcupine in 1909 was followed by the completion of a spur line from Porquis Junction to South Porcupine in 1911. A similar spur line was built to Elk Lake in 1913 following valuable ore discoveries in 1907-08. A branch to the new pulp and paper mill at Iroquois Falls was completed in 1913. The other mills in the Region are located on the former Transcontinental line which links with the Ontario Northland at Cochrane.

Small communities devoted to a single industry are characteristic of northeastern Ontario. There are numerous small centres of population, incorporated or unincorporated, that are not shown in the tables. Larger centres such as Timmins and Kirkland Lake serve as distributing centres for nearby mining settlements. Kirkland Lake is not an incorporated centre, and for that reason population figures are estimates, based on the population of Teck Township of which it is part. Cochrane, located at the junction of the northern branch of the C.N.R. and the O.N.R. is an important distributing and rail centre.

The growth of population in the Clay Belt Region has been the result of the development of both forest and mining industries, but taken as a whole the fluctuations in the rate of growth have followed the fortunes of gold mining. The increase of only 1.9 per cent. over the period 1941-51, compared to an increase of 38 per cent. between 1931-41 is a result of decreased production and employment in the gold mining industry. It is important to recognize that while the total population increased during 1931-41, the populations of towns dependent on pulp and paper mills declined. The reverse situation has been true during the past decade. The population of Timmins doubled during 1931-41, but lost 4 per cent. of its population in the succeeding decade, while that of Kapuskasing, a paper town, declined 10 per cent. during the thirties but increased 37 per cent. over the past decade. The rate of total population growth is by no means general throughout the Region and does not serve as a good indicator of prosperity.

People of British and French origin now constitute equal proportions of the population and a variety of other racial origins represent the balance or approximately one-fifth of the total. Those of British origin comprise most of the population of Timiskaming, but there is a somewhat greater proportion of those of French origin in Cochrane, the northern district.

A study of the age groups of the total population of 1951 and 1941 reveals that there has been a substantial reduction in the middle age groups which represent the bulk of the labour force. This diminution has doubtless been the result of the emigration of gold miners and their families to more prosperous areas. The birth rate has been sufficiently high to offset this loss, with the net result that the population is approximately the same in number as it was a decade ago, but with substantially more children and fewer adults. The number of the senior members, i.e. those over forty-five, has increased, however, and they now form a greater proportion of the total population, although still small by southern Ontario standards.

#### Mining

Mining is the most important industry of the Clay Belt, its production (\$79,439,786 in 1952) being approximately 17.5 per cent. of the Provincial total and 20.6 per cent. of the metal mining total.

The Region first became an important mining centre in 1904 when silver was discovered near the present town of Cobalt in Timiskaming District. The first ore mined was very rich, often containing 4,000 fine ounces of silver to the ton. In addition to silver, small amounts of nickel, copper, gold and arsenic were found. The commonest of the metals found in the ore was cobalt after which the town was named. It was originally considered to be a nuisance by the miners but it gradually developed commercial value after 1910 when it was first used as a steel hardening alloy.

The Cobalt district is considered to bave been one of the world's greatest silver producers, ranking with Butte (Montana), Leadville (Colorado), and much greater than the Comstock Code in Nevada. Potosi in Bolivia has likely produced more than the Cobalt field, but while it had a "head start" of several centuries, early statistics are not reliable. From 1904 through 1939, Timiskaming produced 433,602,297 ounces of silver. There was little production during the depression because the district was considered to be nearly worked out and the low price of silver did not make exploration worth while. However, the second World War required enormous numbers of machine tools, with a consequent demand for cobalt to harden their cutting edges. This demand has continued since the end of the war. In 1952, 229,152 pounds of cobalt worth \$637,084 were mined. The metal is now used for various

purposes including parts of jet engines subject to great heat, and radio-active cobalt "bombs" for the treatment of cancer. Thus the unwanted by-product has become nearly as important as the "star" of the show. There were 4,981,660 ounces of silver mined in Timiskaming in 1952, an increase of 60 per cent. over the previous year. Other metals were produced in this district including copper (New Ryan Lake Mines), lead and zinc from a new mine (Matarrow), gold (823,793 ounces), nickel and arsenic (arsenic is a by-product of silver mining and is generally not listed as a metal).

Some prospecting was carried on in the north after gold was discovered in Hastings County in 1866. Geological reports published in 1896 and 1899 indicated gold in the Porcupine area of Cochrane. However, careful exploring did not begin until after 1907 in the wake of the Cobalt silver boom. Among the successful prospectors, Ben Hollinger, Sandy McIntyre, Harry Preston, the Timmins brothers, W.A. Wright, and Harry Oakes are the few whose names are remembered. It must be remembered that most mineral hunting has ended in failure. Only a few hundred mines have resulted from the many claims, and only a few of these mines have been successful, although successful mines have been spectacularly so. From 1918 to 1949, 99,898 new prospectors' licenses were issued in Ontario and some 297,000 claims were recorded. It is probable that many of the licenses were issued to amateurs since the only qualifications needed are (1) five dollars, and (2) that the applicant be over 18. In the Clay Belt Region 3,222 claims were recorded and 4,227 were cancelled in 1952. A claim is what the name implies. It can be made only on Crown land (since owners of real estate generally have title to minerals found there), and consists of one 40-acre square clearly marked by stakes. Claims must be recorded with the Ontario Department of Mines within 30 days. Provincial parks, road and railway allowances, and Great Lakes beds are not normally open for staking. Indian Reservations require special permission for prospecting.

In spite of the gold mining industry's handicap of a nearly fixed price and rising costs, the Region (mostly in Cochrane) produced 1,987,139 ounces worth \$69,130,881 in 1952. This was a slightly greater volume and slightly lower value than in 1951. This was most of Ontario's production which was about one-half of Canada's. Production was achieved with the aid of 12,110 employees, a slightly smaller number than in 1939, but still 27.3 per cent. of Ontario miners.

The largest mining employers in the Region are: Hollinger Mines (nearly 2,000) McIntyre-Porcupine (about 1,200), and Dome Mines (nearly 1,000) at Timmins, Kerr-Addison at Larder Lake (about 800), and Lake Shore (about 700) at Kirkland Lake. Other well-known mines such as: Pamour, Kirkland Lake, Preston-East Dome, Aunor and Wright-Hargreaves have from 300 to 450 employees each. Smaller mines like the Broulan Reef, Coniaurum, Mecassa, Teck-Hughes, and Upper Canada have from 200 to 300 employees each. About two-thirds of these employees are underground miners. The rest are mill workers, office workers, mechanics, managers, engineers and guards.

In 1945 the Provincial Government opened a mining school at Haileybury. This provides skilled labour on a level between that of the average foreman and of the professional engineer and geologist. Courses run for two or three years and graduates are in great demand.

Interesting new developments in this Region include tungsten ore from several of the gold mines. Small amounts were produced during the war but most of Canada's intermittant production has come from British Columbia. The Johns-Manville Company operates an open pit mine at Matheson (near Porcuping) which began operations in 1950.

#### Manufacturing

Manufacturing in this Region, while second to mining in its gross value of production, is of considerable importance, especially in international trade. The value of goods (\$79.8 million in 1950) is approximately 1.2 per cent. of the Provincial total and wages paid are 1.1 per cent. of all manufacturing wages. Of the Provincial total and wages paid are 1.1 per cent. of all manufacturing wages. More than y0 per cent. of the Region's industrial employees (including office staffs) are men. In 1953 there were an estimated 6,400 employees in manufacturing industries in the Region. Approximately 16 per cent. of the labour force is engaged in manufacturing, compared to 26 per cent. in mining and 10 per cent. in forestry and logging.

(\$69,690,866 in 1950) and the smaller part in Timiskaming (\$10,116,360). New Liskeard is the most important manufacturing centre in Timiskaming. The Hill-Clark-Francis Company employs the largest number (about 400) in its saw mill and sash factory. The next largest industry in the town is the Wabi Iron Works Limited with some 175 workers which produces machinery and supplies for mines and paper mills. Kirkland Lake, being a mining town, has a small plant producing diamond drills and parts. Lumber mills are located at Latchford, Haileybury, Hearst, Cochrane, Timmins, Swastika, Englehart and Kirkland Lake.

The most important plants are in the forest areas of Cochrane. The Abitibi Power and Paper Company has a very large (and recently remodelled) mill at Iroquois Falls which makes more than 800 tons of newsprint every working day. The mill was built between 1913 and 1915 and employs approximately 1,400. Many of these people live in Iroquois Falls, a town established and controlled by the Abitibi Company. The town is well supplied with schools, churches, a library, hospital, and even a golf-course.

The company has also a smaller plant at Smooth Rock Falls which it bought in 1927 (it was built in 1916-17). This mill produces more than 200 tons of bleached sulphite pulp a day. This pulp is raw material for other mills which turn it into fine papers, such as those used in magazines. Smooth Rock Falls is also a company town with the usual amenities, but smaller than Iroquois Falls.

The only other mill in the Region is that of the Spruce Falls Pulp and Paper Company, at Kapuskasing. This plant, with more than 1,000 employees, produces about 750 tons of newsprint a day, most of which is used by the New York

Although exact figures are not available, it is obvious that most of the Clay Belt's manufacturing is accounted for by pulp and paper. The Region produces 6-7 per cent.of Canada's total, of which about 80 per cent. is exported. Pulp and paper are the largest exports (\$939,239,000 in 1951) with approximately 23.9 per cent. of the total value (excluding gold). Most of the pulp and a large fraction of the paper produced goes to the United States which imported almost half (1,108,466 tons out of 2,777,486 tons used) of its newsprint from this country as early as 1923. This fraction has since increased to about four-fifths. This may be expected to increase in the future, as American mills produce less newsprint than they did in 1913 and consumption has risen in the United States from 30.4 pounds per capita in that year to 78.4 pounds in 1950.

#### Forestry

The fertile soils of the Clay Belt sustain the finest pulpwood forests in the Province. Although the northern reaches of the Region include the barrens of the coastal plain, the southern area, encompassing the clay belt proper, sustains three-quarters of its area in productive forests. In Timiskaming District, conifers and hardwoods are found in equal volume but conifers constitute an increasing proportion of the total in the more northern areas. Among the conifers, the major species is by far black spruce followed by balsam, white spruce and jack pine. Poplar and white birch are the only hardwoods of substantial volume.

The conifers in the Clay Belt Region are utilized extensively by the pulp and paper industry, in contrast to the lumber industry. The preponderance of black spruce, which is normally a small species among spruce, and the stunting influence of the northern climate on the growth of trees, has meant that only about one-fifth of the growing stock has developed to saw-log size. There is, however, a small but thriving lumber industry that utilizes white spruce, a larger species which grows in accessable locations along the banks of rivers and streams.

Black spruce constitutes about four-fifths of the annual volume of timber utilized. Cutting is carried on under a timber management plan supervised by the provincial government and the black spruce cut does not exceed the allowable cut consistent with sustained yield. The annual cut of the hardwoods, on the other hand, is virtually nil with the result that there is a trend toward more and more poplar and white birch at the expense of the spruces.

#### Agriculture

The greater proportion of the districts of Cochrane and Timiskaming, except for the most northerly section of Cochrane, is underlain by the pre-cambrian rock structure of the Canadian Shield. The section bordering James Bay has an underlying structure similar to that of Southern Ontario, with limestone much in evidence. Agriculture in the Region falls within two main belts, the Little Clay Belt in Timiskaming, embracing the towns of New Liskeard and Kirkland Lake, and the Great Clay Belt stretching from Cochrane's eastern border in a north-westerly direction and including the mining regions of Matheson, Porcupine and Cochrane.

Despite the notice which the clays and silts of these two belts have received, the soils are actually much less productive than those of Southern Ontario. Drainage is the greatest problem as in all clay areas where flat, hard packed soils prevent the necessary run-off of excess moisture. Raintall in northern Ontario declines from about 30 inches annually in the south to an average of 15 inches on the shores of Hudson Bay. However, a great deal of this moisture accumulates in the late summer and early fall and is a severe handicap during the harvesting season.

The average length of the growing season declines rapidly as one moves north, from 175 days in the south to 110 days in the north. Early spring seeding in most areas is out of the question. Thus the northern farmer is faced with a climatically foreshortened season which necessitates the utilization of crops with a short growing period.

Of a total land area of 37 million acres 630,000 or 1.7 per cent. are in farms. Improved land occupies 40 per cent. of the farm area. Estimated average farm income for the Region stood at \$1,160, the lowest in the Province, well below the Provincial average of \$3,023 in 1950.

As a result of some stream development and drainage schemes, the Little Clay Belt in Timiskaming is the more productive of the two. Almost any hardy crop that will mature in around ninety days can be grown successfully, although light frosts occur some years around the middle of June and again in August, Hay, oats, barley, mixed grains, wheat and potatoes are the chief crops. Potatoes are grown particularly where deep sandy soils permit. Dairying is the leading agricultural activity. A daily market for whole milk exists locally and in the mining towns of Kirkland Lake, Noranda and Timmins, supplemented by the summer resort camps of Temagami. Four creameries and one cheese factory operate on a year-round basis. Some fine herds of beef cattle are being established. The diversified nature of farming in the Little Clay Belt is indicated by the presence of poultry and hogs on most farms. New Liskeard, at the head of Lake Timiskaming, and the Kirkland Lake area are the chief markets for the produce of this belt.

The centres of Matheson, Porcupine and Cochrane provide markets for agricultural produce in the Great Clay Belt. Unable to compete economically with southern Ontario, the farming areas of Cochrane are dependent on local mining and lumbering towns for markets. The Matheson district, the most southerly ecotor of Cochrane, is the first area encountered as one moves north-west along the Ontario Cochrane, is the first area encountered as one moves north-west along the Ontario Northland Railway. Good clay and silt soil promote dairy farming and specialty Northland Railway. The area around the town of Cochrane is well known for the high quality and yield of potato seed. Current prices make potatoes one of the best cash crops in the district.

To the east and west of Porcupine, especially in the valley of the Mattagami River, where the slope of the land permits an easier run-off, fine loamy soils encourage dairy and poultry farming and the growth of potatoes and vegetables for nearby mining markets.

The remainder of the Clay Belt stretches north-west through Cochrane, Kapuskasing and Hearst. Three creameries and two cheese factories in the district of Cochrane absorb the produce of local dairy farms. Hay, oats and potatoes are the main crops on improved land. There is little farming between Cochrane and Kapuskmain, but between Kapuskasing and Hearst, there is another fifty mile stretch, principally of hay, oats and potatoes.

advantage from and is dependent upon, grass silage for livestock feed. The coolness of the growing season elimantes corn for feed, but grass, better able to withstand the cold and requiring somewhat more moisture than corn, is grown in abundance. Influenced by the good quality of hay and excellent pastures, some farmers have changed from dairying to beef production since World War II. There is a ready market for beef in northern Ontario and profit can be derived by raising livestock with a minimum of labour and capital, particularly in areas where distance from urban centres makes shipment of fluid milk a problem.

In summary, it would seem that agriculture in northern Ontario, because of the low productivity through poor soils and adverse climatic conditions, must remain dependent on the neighbouring mining and lumbering districts for markets. In addition, agriculture will continue to compete with lumbering for the utilization of the best soils in the Region. Although further development through better drainage and mechanical techniques remains possible, it must await the expansion of local markets.

VALUE OF SELECTED AGRICULTURAL PRODUCTS CLAY BELT REGION
(In thousands of dollars)

Products	Cochrane	Timiskaming	Region	Region as a % of Ontario
Field Crops - 1953 Oats Mixed Grains Potatoes Hay	448.4 71.6 393.0 1,672.0	719.6 298.1 124.0 1,476.0	1,168.0 369.7 517.0 3,148.0	2.4 1.0 4.1 3.4
Livestock on Hand - 1953 Cattle	1,918.9	2,696.0	4,614.9	1.2
Poultry on Hand - 1952 Hens & Chickens	91.3	87.9	179.2	0.8

Source: Ontario Department of Agriculture

#### THE NICKEL RANGE REGION

#### Introduction

The Nickel Range Region is composed of the district of Sudbury and the district of Manitoulin, which includes the island of that name.

Manitoulin, the largest fresh-water island in the world, is separated from the north shore of Lake Huron by North Channel and is bounded on the east by the waters of Georgian Bay. The island is nearly one hundred miles long and from two to forty miles in width, with a total area of 1,073 square miles. The first recorded white visitor was the Jesuit missionary, Joseph-Antoine Poncet, a cousin of the martyr Father Lalement. Father Poncet lived with the Ottawa Indians on Manitoulin Island from Cctober 1648 until May of the following year. Returning in the fall, he again spent the winter with them.

Although some Huron survivors of the Iroquois invasion of 1650 took refuge on the island they soon left to find greater security at the settlement on the Island of Orleans, near Quebec. However, in 1652 the Iroquois descended on Manitoulin to punish its inhabitants for their kindness to the vanquished Hurons. The few who escaped their vengeance fled in panic and for nearly twenty years the island was deserted.

After the Ottawas began to return in 1670, a Jesuit mission, or a branch of a mission, was established among them and flourished until the founding of Detroit in 1701, when the majority of the Indians left the island and moved closer to the new post. So few remained that the mission was abandoned and the island was forgotten for nearly a century.

In 1790, the Northwest Company built a fort at La Cloche and some thirty years later the Hudson's Bay Company opened a post on the north shore about

two miles from the mouth of the Spanish River. After the amalgamation of the two companies, one of the posts was closed, but the other seems to have remained in operation until about 1890. These posts were situated to take advantage of the trade of the island as well as to do business with any travellers on the route between Montreal and the far west.

Early in the nineteenth century, the annual distribution of presents to the Indians was transferred from Amherstburg to Manitoulin. In 1838, under the government of Sir Francis Bond Head, the island became a reservation, in return for which the Indians ceded 1,500,000 acres of the best land in the colony, 23,000 islands in Georgian Bay, one-half of the six mile square reserve near Amherstburg and other tracts.

After operating the Manitoulin reservation for some twenty years, the government decided that the number of Indians interested was not large enough to warrant continuing the scheme. Also, the island was fertile and could be colonized. Therefore, by the Treaty of 1862 the Indians of Manitoulin were given \$700 cash, individual land grants and the promise of an annuity based on the income from sales to settlers, as compensation; the reservation was discontinued and the island opened for settlement. The Indians of Wikwemikong did not approve this change in government policy, with the result that they were not included in the treaty and the portion of the island occupied by them became the Manitoulin Island Unceded Indian Reserve.

Except for isolated outposts like the one operated by the Hudson's Bay Company at Whitefish Lake, the portion of the Nickel Range Region lying north of Lake Huron was practically unknown prior to the building of the C.P.R. The city of Sudbury started as a railway construction camp early in 1883. The first buildings, a bunk house and stable, stood in a clearing of about half an acre at the present 158 Elm Street East. Although the local rock formations interested several of the engineers and other professional men in the camp, the amount of the then-worthless metal, nickel, discouraged serious prospecting until about the time that Sudbury ceased to be a railway camp. By then expert opinion of the value of nickel had changed and, with the change, the District entered its present era of development.

#### Population

The unique feature of the population of the Nickel Range is the increase recorded in Sudbury District. The intercensal (1941-51) increase was 35.6 per cent., the largest among the districts of northern Ontario. The increments in previous decades have been equally spectacular: 38.7 per cent. in the period 1931-41, 35.4 per cent. in 1921-21, and 84.9 per cent. in 1901-11. The steady increase in the population of Sudbury District since the beginning of the century at a rate exceeding one-third of the population at each census is a record unparalleled in Ontario. The population of Manitoulin, on the other hand, has remained more or less stationary over the same period, declining in the period 1901-21 and increasing slightly thereafter. The increase in the period 1941-51 was only 3.4 per cent. The population changes of the Region as a whole correspond closely to those of Sudbury District where nine-tenths of the Region's population is located. Estimated population of the Region in 1953 was 129,000.

Like that of the adjoining Clay Belt Region, the population of the Nickel Range is divided about evenly between people of British and French origin, with a remaining fifth composed of people of a number of racial origins. The proportion of the British has declined slightly over the last three decades, while that of the French has risen. The proportion of "others" rose sharply between 1931-41 of the French has risen. The proportion of "others" rose sharply between 1931-41 of the from 14.9 per cent. to 21.6 per cent., but has remained constant since then. The from 14.9 per cent is a sincreased, but not sufficiently to prevent a decline in number of native Indians has increased, but not sufficiently to prevent a decline in their proportion relative to the total population. In Manitoulin, the population has remained predominately British, with about one-fifth of the population native Indians. During the last three decades the population of British origin has declined numerically while the native Indians have increased.

As in the Clay Belt, the pattern of Settlement in Sudbury District has been determined by railways. The importance of minerals near Sudbury, however, has meant a concentration of population in Sudbury and nearby towns including Copper

Cliff. The greater urban area of Sudbury accounts for well over half of the population of the Region, with 70,884 people in 1951. Among the major metropolitan and urban areas it ranks seventeenth in Canada, seventh in Ontario, and second in northern Ontario, exceeded only by Fort William-Port Arthur. The growth of the city has been responsible for, and paralleled that of Sudbury District, mentioned above. The settlements on Manitoulin Island are confined to small centres which serve as distributing points for the predominately rural population.

The intercensal increase in the population of the Nickel Range may be attributed largely to the high birth rate which is characteristic of northern Ontario. The birth rate in Sudbury District in 1951 is the highest in Ontario except in the James Bay Region. A projection of birth and death rates on the mean population figures, however, indicate that the actual increase was not a result of births alone. That regional immigration did occur is confirmed by a study of age groups in the population during 1951 and 1941. In 1941, for example, there were 16,800 between the ages of fifteen and twenty-four but in 1951 20,400 were recorded between the ages of twenty-five and thirty-four. Actually there is a pattern of continual migration, of young people entering the Region and of senior members leaving it, with a greater number of the former than the latter. The median age of the population is only 24.0 years, the lowest in Ontario.

## Mining

Copper was mined in Upper Michigan and northern Ontario by Indians several centuries ago. However, it was the relatively new science of geology which pointed out the richness of the Michigan field in 1841. A similar survey of the Sudbury Region in 1848 (actually, it was on the Whitefish River near Lake Huron, about 35 miles south of Sudbury city) indicated copper and nickel ore. In 1856, a land surveyor stumbled on the Creighton mine. There was little demand for either copper or nickel at the time, nor was there any technique for separating the two metals. The ore deposit was re-discovered in 1883 when the Canadian Pacific Railway built its transcontinental line through the district. At that time, various tests showed that nickel-steel armour plate was much tougher than ordinary steel. Although the metallurgy of nickel was imperfectly understood then, and the metal was believed to be quite rare, some 830,000 pounds of nickel were produced in 1889. Production rose to 45,500,000 pounds in 1914, nearly all for armaments, and 92,500,000 pounds in 1918. Mining declined sharply at the end of the war, International Nickel closed its mine for 12 months during 1921-22), but exceeded the wartime level by 1929 when civilian industry learned to use the new metal. Most of it went into heavy machinery or motor cars, providing a considerable part of their present reliability. The early years of the depression caused production to slump badly but it rose to a new high of 128,500,000 pounds in 1934. The war, of course, increased the demand to about the present level. In 1972, there were 281,040,824 pounds of nickel mined in this Region valued at \$151,626,438, and 250,230,034 pounds of copper worth \$70,843,158. Most of this production (nickel especially) was exported.

The gross value of minerals (nearly all metals) produced was \$250,296,272 in 1952 or 55.2 per cent. of the Provincial total in 1952. In that year 18,446 were employed in the mines, approximately 41.6 per cent. of all Ontario miners.

The great bulk of the production is contributed by the International Nickel Company which has several mines in the Sudbury area (there is no mining within the city limits). These are the well-known Creighton, Frood-Stobie, Garson, Levack, Murray and Crean Hill mines. The Frood-Stobie began as an open-pit operation but is now largely underground. This group of mines with more than 6,000 employees is believed to be the world's largest underground operation. In addition, more than 8,000 work in the smelters, refinery and concentrator at Copper Cliff and Coniston, the offices, and the Company's standard gauge electric railway (which has 67 miles of track). There is also a large nickel refinery at Port Colborne on Lake Erie. The Company has large works abroad where most of the demand for nickel lies. The United States, which uses about two-thirds of the world's nickel (excluding the U.S.S.R.), has a rolling mill at Huntingdon, West Virginia, and a foundry at Bayonne, New Jersey. There are refineries at Acton, England (near London), Clydach, Wales, and rolling mills at Birmingham and Glasgow.

produced by Falconbridge Nickel Mines, which began operations in 1928. This firm has more than 2,000 employees in the Sudbury area (Falconbridge, Hardy, and McKim mines, concentrator, and smelter) and a large refinery at Kristiansand, Norway.

These two companies do a great deal of exploration, largely in the Sudbury basin. International Nickel has reserves of about 250,000,000 tons of ore, while Falconbridge has approximately 33,000,000 tons. These figures represent 20 to 25 years production at the present rate. The ore varies in mineral content, but the grade mined by Falconbridge is probably typical --1.74 per cent. nickel, and 1.0 per cent. copper. This does not imply that the reserves include all or a large part of the existing ore, as geologists tend to be rather conservative.

Several interesting by-products are obtained from the ore (largely from the Frood mine). More cobalt (1,192,771 pounds worth \$2,589,819 in 1952) was mined there than in Timiskaming, and silver production (1,243,275 ounces) was about one-quarter that of the Clay Belt. International Nickel also produces about one-half of the Region's gold, almost all of Canada's platinum metals, and a large share of the country's tellurium, and selenium. The commonest element in the nickel-copper ore is iron which has always been wasted. Recently, International and Falconbridge have announced plans to recover some of that iron. The International Nickel Company has awarded a contract for a \$16,000,000 mill which will process the ore.

The best known development in the industry is the 'stockpiling' plan of the American government, which is paying premium prices for nickel and copper to be smelted from low-grade, and otherwise useless, ores. International must deliver 120 million pounds of nickel and 100 million pounds of copper by the end of 1958. Falconbridge is doubling its capacity to 60 million pounds to fill its contract for 150 million pounds of nickel by the summer of 1962, and 77 million pounds of copper by the end of 1958.

The great demand for nickel and copper has brought several new mines into active exploration; East Rim Nickel, Ontario Pyrites, Nickel Offsets Limited, and Milnet Mines. These mines ship their ore to Falconbridge for refining.

Gold ore is found in this Region but rarely in commercially valuable deposits. In 1952, 84,526 ounces of gold worth \$2,894,387 were produced.

Non-metallic production consisted mainly of quartz (\$1,116,182 in 1952) which was used in the Copper Cliff smelters. Most of this was quarried on Manitoulin Island (\$758,093) and was the only mineral mined there.

# Manufacturing

That one-fifth of the labour force in the Nickel Range is in manufacturing industries suggests that manufacturing is of considerable importance. There were an estimated 10,500 employed in 1953, and the gross value of production, \$206.8 million in 1950, accounted for 3.0 per cent. of the manufactures of Ontario. A large part of this value is contributed by the smelters at Copper Cliff which are discussed in the mining section above. The relative importance of these smelters in the Region is reflected in the average manufacturing wages and salaries which are higher there than in any other Region in the Province. Average wages and salaries were \$78.99 in 1953.

Canadian Industries Limited has a small plant at Copper Cliff which makes sulphuric acid from the sulphur which must be removed from the nickel-copper ore.

The Dominion Tar and Chemical Company has a plant at Sudbury (with about 100 employees) which produces creosote. There are several saw mills in the City, a foundry, and a small brewery.

The largest mill (with the exception of the Copper Cliff complex) is the K.V.P. (Kalamazoo Vegetable Parchment) pulp and paper plant at Espanola. This mill with about 1,000 employees produces kraft paper as well as newsprint.

There are a few sawmills on Manitoulin Island.

## Agriculture

Agriculturally, the districts of Sudbury and Manitoulin which comprise the Nickel Range Region, are quite different. Farming is the most important economic activity on Manitoulin Island, which is similar to southern Ontario in many ways. In the district of Sudbury, however, mining and lumbering both far surpass agriculture in importance.

Most of Sudbury is rocky upland covered by sandy drift, with a large number of lakes in rocky basins. There is very little soil suitable for agriculture. Two and a half per cent. of the total area is farm land, and of this only 34 per cent. is improved. Agriculture is confined mainly to the low area forming the southern boundary of Sudbury along Georgian Bay, and the Sudbury Basin, a boatshaped area about 23 miles long and 8 miles across at its widest. The Basin is floored by clay, silt and sand. Parts of this plain are too sandy or gravelly for good farming, there are some rock outcrops, and the lowest part, occupied by the Vermillion River, is too wet. The average length of growing season is about 170 days. Chelmsford, with a population of 1,300,is located 12 miles northwest of Sudbury on the Whitson River, and is the centre of the agricultural district in the Sudbury Basin.

Agriculture followed lumbering to this area, and held on because of the market supplied by the mining towns. The farms are narrow strips with rural homes concentrated along the main gravel roads with six to twelve houses per mile. Fields are small, the crops chiefly hay and oats, with high quality potatoes as an important cash crop. Although there are some cows, with pasture both in the improved area and in rough clearings, milk production is insufficient to meet the demand in Sudbury. In the dispersed settlements in small pockets among the hills south of Sudbury, the farms are larger and there are some good dairy herds. Much of the land is fit only for bare subsistence or part-time agriculture, however. Both farm acreage and number of farms in the district has declined in the last ten years.

The islands in Lake Huron which make up the district of Manitoulin differ from the adjoining mainland. The Niagara Escarpment is the most prominent feature. A large area consists of almost bare rocky plain, but there are parts of sufficient depth to form arable soils. The climate of Manitoulin resembles that of Sudbury, with lesser extremes of temperature and lower rainfall. The growing period extends for about 175 days. The vegetation is similar to that of the Bruce Peninsula.

Shallow soil covered with woods or rough pasture is characteristic of the higher parts of Manitoulin. In the less extensive lowland areas, fine sand, silt or clay affords good soil and these are the well-populated farming sections. Over 900 farms occupy 30 per cent., or 290,000 acres of Manitoulin District. Only one-quarter of the farm land is improved. Of this, 73 per cent. is under crops, 24 per cent. is cultivated pasture. Average farm size is 303.5 acres, more than twice the average for the Province.

There are two main patterns of agriculture. On the deeper soils a mixed crop and livestock economy prevails, while the shallow and stony soils are utilized for grazing. Some farmers own 100 acres of good soil on which they grow crops and keep small herds of breeding stock. In addition, they may have grazing rights to as much as a thousand acres of public range land for pasture during the summer. The emphasis on grazing is indicated by the number of livestock in the district--22,050 cattle and 14,805 sheep, 7 per cent. and 4 per cent. respectively of the total in the Province at June 1, 1953. Because of the problem of growing enough feed for winter on the shallow soils, cattle are raised on the Island for finishing in the more fertile pastures of Southern Ontario, and only the breeding herd is kept through the winter.

Dairying is of minor importance. A few good dairy herds supply the towns and the two creameries on the island. In spite of conditions similar to those of eastern Ontario, there is no commercial cheese making.

The raising of turkeys has become important recently. One hundred and sixty-five farms were engaged in turkey farming in 1951, 4 per cent. of the total for Ortania.

success. There is a source of food in old breeding herds on the island, the colder climate produces better pelts, location of a farm on bedrock makes wire flooring and its expensive replacement unnecessary, and the numerous small islands provide a natural situation for fur farms without extensive enclosures. The largest fur farm in Ontario, with several thousand minks and foxes, is on Manitoulin.

In spite of the dependence on farming in Manitoulin District, it is a marginal and extensive type of agriculture, handicapped by isolation and lack of good arable land. The area of farm land increased by 4 per cent. from 1941 to 1951, but the number of farms declined 17 per cent. and the farm population 4 per cent. in the same period.

VALUE OF SELECTED	AGRICULTURAL PE	RODUCTS NICKEL :	RANGE REGION	
	(In thousands	Region		
Products	Manitoulin	Sudbury	Region	As a % of Ontario
Livestock On Hand - 1953				
Cattle	2,913.3	1,968.9	4,882.2	1.2
Sheep and Lambs	339.5	14.5	354.0	3.6
Field Crops - 1953				J
Oats	221.4	508.2	729.6	1.5
Mixed Grains	348.5	59.0	407.5	1.1
Potatoes	59.0	795.6	854.6	6.7
Hay	826.0	1,077.0	1,903.0	2.0
Poultry on Hand - 1952	020.0	1,011.0	1,903.0	2.0
Hens & Chickens	46.7	79.1	125.8	0.6
Turkeys	57-7	9.3	67.0	2.9

Source: Ontario Department of Agriculture

#### Forestry

The forests of the Nickel Range, which cover approximately four-fifths of the total land area, supply the raw materials for the pulp and lumbering industries. The Region may be conveniently divided into three sections, Manitoulin Island, southern Sudbury district, and northern Sudbury district. Sudbury city and Chapleau are located near the centres of the southern and northern areas respectively.

The forests of Manitoulin Island still support a small pulpwood logging industry but almost all the saw-log timber cas been removed.

Originally the forests of southern Sudbury District contained some fine red and white pine stands, but many of these criginal pine areas are now covered with stands of poplar and white birch as a result of logging and forest fires. At present almost 60 per cent. of the land is classed as mixed forest, containing both hardwood and coniferous species. White birch and poplar constitute 39 per cent. of the productive forest but white and red pine, the most important conifer species, make up only 22 per cent. Jack pine is utilized extensively for pulp with the result that actual cut exceeds allowable cut on a sustained yield basis by about 20 per cent. Actual cut of other timber, however, remains within the limits set by a sustained yield policy. Excessive volumes of poplar and white birch remain unused on Crown lands.

The topography of the northern section of Sudbury District is characterized by rolling country. The forest cover is similar to that of the southern section except that black and white spruce are much more abundant at the expense of the pines. When the Forest Inventory results are published for this area it will be possible to assess the extent of the pulp and lumber utilization.

# THE SAULT REGION

#### Introduction

The Sault Region lies north of Lake Huron and St. Marys River. It is bounded on the west by Lake Superior and the District of Thunder Bay, on the north by Cochrane District and on the east by the District of Sudbury.

Although the city of Sault Ste. Marie is best known for the ship canal which was opened in 1895, the history of the region goes back to the early days of the French regime when the settlement on the south shore of the river was the most important fur trading post on the route between Montreal and Grand Portage. This was half a century before the founding of Detroit.

The first white settlement north of the river was the shipyard and smelter built by Alexander Baxter at Point aux Pins in 1770. The venture was not successful, however, and was soon abandoned. No further attempt at settlement in the area was made until 1796. In that year, the North West Company moved their post from American territory to the Canadian side, where they built a stockaded post and constructed the first Sault Ste. Marie Canal, 2,580 feet in length, with a lock 38 feet long by 8 feet 9 inches wide.

This work was demolished on July 23, 1814 by the American raiding party which burnt the stockade. Their mission accomplished, the invaders withdrew promptly, thereby missing what would have been the great prize of the war -- a cargo of furs which arrived from Grand Portage while the ruins were still smoking. The cargo was valued at over a million dollars, a fabulous sum for that time.

After the War of 1812, both the North West Company and the Hudson's Bay Company established posts at Sault Ste. Marie, which operated until the union of the two firms in 1821. No buildings of that era remain. The oldest building in the city is the stone house erected by Charles Ermatinger, an independent fur trader, in 1822.

The importance of Sault Ste. Marie as a railway centre was assured in 1888, when the Canadian Pacific Railway completed a bridge across the St. Marys River linking its Canadian lines with the American system. In the same year, work was begun on the canal, which was completed in 1895. The canal has one lock which is 900 feet long, 60 feet wide and 18.2 feet deep.

In spite of the channelling of transportation facilities through Sault Ste. Marie, the distance of the city from other manufacturing centres is a drawback to its development. The "Soo" is nearly 500 miles by highway from Toronto. By rail, the distance is 439 miles. To reach the lakehead by rail, passengers and freight must go via Sudbury or by the Algoma Central Railway to the Canadian Pacific or Canadian National lines at Franz and Oba. The Canadian Pacific Railway connects through Sault Ste. Marie with Duluth and Minneapolis-St. Paul, 430 miles and 500 miles away respectively.

#### Population

The rate of population growth in the Sault Region has been typical of most districts in northern Ontario. The increment of 24.0 per cent. during the decade 1941-51 was higher than the provincial average growth of 21.4 per cent. In part, the increase may be traced to the high birth rate, which in 1951 was 28.0 per thousand population, the fourth highest of the regions of Ontario. A study of the age distribution, however, reveals that migration to the Region has augmented the total population. For example, the 35-44 age group in 1951 is larger than the 25-34 category in 1941. The death rate of 8.6 per thousand in 1951 is lower than the provincial average of 9.6, the result of a somewhat younger population. The median age of the Sault population was only 26.5 years while that of all Ontario was 30.3.

Ethnically, about half of the population is of British origin and half of other European nationalities, notably French, Italian and Finnish. During the last two decades the proportions have remained remarkably constant, although the British portion has declined about two per cent. proportionally in favour of the French.

The location of Sault Ste Marie at the focal point of water and rail transportation between Lakes Huron and Superior has resulted in a concentration of population on both sides of the St. Marys River. On the Canadian side, the development of industry has amplified this trend. The Ontario city, with a population of 40,490 including suburbs in 1951, is larger than its American twin. Sault Ste. Marie (Ontario) and the area in the immediate vicinity of the city contains two-thirds of the population of the Region. The balance, except those in the small centres of Blind River and Thessalon on the North Channel, are widely dispersed in the rural townships. The trend toward urbanization in the Region is evident from a comparison of the urban population increase with the rural rate. Twenty years ago about half of the population was in the rural category.

#### Manufacturing

Approximately 40 per cent. of the labour force in the Sault Region is engaged in manufacturing, the highest proportion among the regions of northern Ontario, and sixth highest in the Province. This dependence on manufacturing is in fact a dependence on one industry and one firm -- the Algoma Steel Corporation. The steel works, together with a plant producing chromium and ferro-alloys for the iron and steel industry and a small plant producing coal-tar chemicals as a bi-product of the coke ovens, constitute the largest industry group in the region.

The steel mill was established by Francis Henry Clergue, an American promoter who was interested originally in the "Soo's" pulp and paper potential. Iron ore was discovered near Michipicoten harbour in 1897 and this caused Mr. Clergue to develop the Helen mine, the harbour and the Algoma Central Railway, as well as the steel mill. It is interesting to note that while the Algoma mines produce a large volume of iron ore, a considerable part of this is exported and the mill depends on American hematite ore. The Algoma mill is located in a rather unusual place if judged by locations of most North American basic steel producers, which are generally near coal beds and large centres of population, rather than iron deposits.

The steel company had nearly 7,000 employees in 1952, 660 of whom were employed at the company's iron mines near Michipicoten. The balance, about two-thirds of the total employees in manufacturing industries in the Sault Region, work in the mills at Sault Ste.Marie. The company had about 2,000 employees in 1935, 3,000 in 1,937 and more than 5,000 at the wartime peak in 1942. Employment dropped until 1945 when this trend was reversed. During the post-war period the company has been able to undertake an extensive expansion programme.

The Algoma plant is the largest basic iron and steel mill in Canada, producing approximately 40 per cent. of all pig iron smelted in this country, and about half of the Ontario tonnage. The company produces an even larger share if its subsidiary, the Canadian Furnace Company at Port Colborne, is included.

The company has completed a new blast furnace (the sixth) which brings the pig iron capacity to 1,240,000 tons annually. Also included in the expansion programme are a battery of 57 new coke ovens, two new open hearth furnaces, a Bessemer converter, a bar and strip mill, a rail and structural shapes mill and a cold roll strip mill. In addition, all railway steam locomotives have been replaced by diesel-electric locomotives and a new railway yard has been completed. The expansion programme, initiated in 1951, is expected to cost \$50,000,000.

The second largest employer in the city is the Abitibi Power and Paper Company. The plant, built originally by Mr. Clergue in 1894, employs more than 600 persons. It has an annual production capacity of 96,000 tons of newsprint, and 30,900 tons of unbleached sulphite pulp (used for newsprint). The company has recently modernized its plant and added a new groundwood mill.

Other plants in the city include the Roddis Lumber and Veneer Company of Canada, a small foundry and machine shop, and a brewery. A number of small saw mills are located in various centres -- Blind River, Iron Bridge, Thessalon, Bruce Mines, and Sault Ste. Marie.

The estimated number of employees in 1953 was 9,700 which compares favourably with the 3,800 employed in 1939 and indicates the expansion that has occured in the interval. A study of employment indices in manufacturing industries

during 1953 shows a difference between high and low periods of 25 per cent. which indicates the fluctuations in employment associated with dependence on one major industry.

# Forestry

Compared to the iron and steel industry in the Sault Region, lumbering and logging is a relatively minor activity, but it provides an important source of income for about three thousand workers each winter. Almost all the area bordering Lake Superior northwest of Sault Ste. Marie is leased to the Abitibi Power and Paper Company. The Forest Resources Inventory (1953) of the Ontario Department of Lands and Forests shows that total utilization is less than the total allowable cut. However, as the political district of Algoma is divided among four different forestry districts, direct comparisons are impossible. In the Sault forestry district (southern Algoma), the allowable cut is about 100,650 thousand cubic feet, while the actual cut is only 9,935 thousand cubic feet. However, most of this cut is directed towards white and red pine (7,179 M.C.F. cut out of an allowance of 7,603 M.C.F.), with other species virtually neglected. About one-third of the allowable cut is of softwoods, while about four-fifths of the actual cut is of softwoods. In the early summer of 1948 a large area in the north central part of the district was burned in one of the largest and most spectacular forest fires in Ontario. The Mississagi fire in the Sault district joined with the Chapleau fire farther north to encompass a total area of more than 600,000 acres. From the burned area some 25 million feet board measure of red and white pine along with smaller quantities of pulpwood species were recovered in the largest salvage operation ever undertaken by the Province. This survey was made after the fire. Since sufficient time has not elapsed since the fire to determine the character of the ensuing forest, the entire burned area has been classified as reproducing forest.

# Agriculture

Very little farming is carried on in the Sault Region. Only 10 per cent. of the total population lives on farms, and less than 6 per cent. of the labour force is engaged in agriculture. Only 1.8 per cent. of the total area of 12 million acres is farm land, and of this 61 per cent. is unimproved.

The northern part of the Region is rocky upland covered with sandy drift of variable depth, with little soil suitable for agriculture. Part of this area and of the District of Sudbury has been set aside as the Mississagi Provincial Forest, in which no farming is permitted.

Almost all of the Region's 1,330 farms are in the low area bordering Lake Superior and Lake Huron southeast from Batchewana Bay and into the District of Sudbury. This strip is bordered by bedrock hills from which the overburden has been washed away, but between these and the lakeshore is some agricultural land. The average length of growing season here is around 170 days. This is a relatively short period compared to the growing season in southern Ontario. The average growing period in Essex County, for instance, is between 212 and 216 days.

The only provincial highway in Algoma District goes through this narrow strip of lowland. The small towns of Desbarats, Bruce Mines, Thessalon and Blind River provide markets for the dairy products, fruits and vegetables grown in the area. To the north and east of Sault Ste. Marie dairying and mixed farming is carried on.

There is some farming in conjunction with other economic activity. Seventeen per cent. of the farms in the district are operated on a part-time basis. Altogether, the area produces less than 1 per cent. of the net value of farm goods in the Province, and food must be imported to supply even the small existing market.

#### Mining

In 1897 the lure of gold brought prospectors into the rocky, inaccessible area of Michipicoten on the eastern shore of Lake Superior. Instead of gold, they discovered the hematite deposits of the Helen Mine, the largest body of iron ore yet discovered in the Province. Mining operations began almost immediately, the first shipments of ore going to the United States in 1900. However, by 1918 the high grade ore had been exhausted and the mine was closed.

Operations began again with discovery of ore at the New Helen and Victoria mines. Prior to 1950 a combination of tunnel and open pit operations was used to extract the ore but since then underground mining has replaced the surface method.

The ore is transported by aerial tramcar to a sintering plant where it is processed by roasting. As the siderite ore loses about one-third of its weight during the treatment, the sintered ore contains a high proportion of iron. Ore is transported to the United States by ship from Michipicoten Harbour or to the mill at Sault Ste. Marie by rail. The railway serving the area is the Algoma Central and Hudson Bay, a line which was built originally to encourage settlement as well as to haul ore but which now derives its income from heavy freight.

Although the mine is operated by Algoma Ore Properties Limited, a subsidiary of Algoma Steel Corporation, almost two-thirds of the sintered ore is exported to the United States.

In 1952 the volume of ore dug was 1,286,612 tons, a slight decrease from 1951. This was 47 per cent. of Ontario's total for 1952.

In addition to iron ore, silica and clay bricks are made in the Region and sand and gravel are quarried to meet local requirements. In 1952 the mining industry of the Sault Region employed about 700 workers, almost all of whom were employed in the Michipicoten area. Payrolls totalled \$2.8 million. The recent discovery of uranium ore in several locations near Blind River may result in further increases in mining production and employment, but this will depend on the extent and the quality of the deposits. An estimated 5,500 claims were staked in the area by October 13, 1953.

#### THE LAKEHEAD AND JAMES BAY REGIONS

#### Introduction

The Lakehead Region is composed of the Districts of Rainy River, Thunder Bay and part of Kenora. The James Bay Region is another name for the vast but sparsely populated Patricia portion of Kenora District.

The area comprising these two Regions is bounded on the north by Hudson Bay, on the east by James Bay, Cochrane District and the District of Algoma, on the south by Lake Superior and the International Boundary and on the west and north-west by the Province of Manitoba.

Since the creation of Manitoba in 1870, the eastern boundary of that province has never been defined, although numerous boundary commissions have come and gone and, in 1884, the problem was carried to the Privy Council. For the past eighty-three years the two provinces of Ontario and Manitoba have agreed that the one should stop where the other began, meanwhile waiting more or less amicably, for the Dominion government to pass the enabling legislation required. Finally, on November 12th 1953, the Speech from the Throne disclosed that the necessary Act will be passed during the present session.

Although vast areas in these regions are uninhabited, particularly in the Patricia portion, others were settled as long ago as the early years of the French regime. Fort William, for instance, has grown up on the site of a trading post built by Dulhut in 1717 which was rebuilt and named Fort Kamanistiquia in 1778.

Fort Kamanistiquia was abandoned during the Seven Years' War and was not re-occupied until 1796. In that year, the Northwest Company, learning that its post of Grand Portage was in American territory, moved its headquarters to the old French fort at the mouth of the Kamanistiquia River. In 1801 the old fort was again rebuilt and, a few years later, re-named Fort William in honour of the company's principal director, William McGillivray.

Until its amalgamation with the Hudson's Bay Company in 1821, the

annual meetings of the Northwest Company were held at Fort William, where over three thousand men would be congregated at the height of the season. However, because the re-organized company adhered to the old Hudson's Bay Company policy of shipping by the northern route out of Hudson Bay, Fort William declined in importance after 1821. In 1885 its decline was arrested by the building of the Canadian Pacific Railway. Since then the city has become the entrepot for the western grain trade.

The strategic position of the Twin Cities at the head of the Great Lakes - St. Lawrence Waterway has been a vital factor in their development as the nexus of water and rail transportation. These cities provide facilities for storing and trans-shipping grain, particularly wheat. Their combined port has become one of the largest in Canada, and their grain elevators among the largest in the world. In turn, the presence of this grain has resulted in the growth of a flour-milling industry.

The forest resources of the Region, exceeding those of any other area in the Province, provide the raw material for the pulp and paper industry. Water resources have been harnessed to provide adequate hydro electricity as a source of power for the industry. Power consumption in the Region increased 127 per cent. during the period 1939-51, a rate exceeding the provincial average. The recently constructed Aguasabon and Pine Portage generating stations mean a continuing emphasis on electric power as the main source of energy.

The pulp and paper mills and the saw mills provide employment for about 41 per cent. of Ontario's foresters and loggers. Although mines in the Region, particularly the new iron ore mine at Steep Rock made an important contribution to the total mineral production in the Province, the industry remains a relatively small employer of labour.

In short the Lakehead Region has probably the most diversified economy among the northern Regions. Approximately 22 per cent. of the labour force is employed in primary industries, 20 per cent. in manufacturing, 18 per cent. in transportation, communication and storage, and the balance in trade, finance and other services. Despite this diversity, however, there remains a problem in employment which results from the seasonal nature of woods operations and the grain trade, a factor for which there is no simple solution.

#### Population

Most of the population of the Lakehead Region is concentrated about the Twin Cities in Thunder Bay District. The population of Greater Fort William - Port Arthur alone totalled 71,191 at the 1951 Census, 45 per cent. of the population for the whole Region

The population of the Lakehead Region has increased by ninefold from 1891 to 1951. The peak of growth occurred between 1901 and 1911, when the population increased by 132 per cent. Growth has been steady since 1911, with an increase of 22.7 per cent. between the 1941 and 1951 Census, compared to 21.4 per cent. for the Province. Population increase in the Region as a whole has roughly paralleled the growth of the lakehead cities. The combined population of Port Arthur and Fort William increased by 305 per cent. from 1901 to 1911. Until 1921, the rate of increase was slightly larger than that of the Region as a whole, and from 1921 to the present, slightly smaller.

Growth of the James Bay Region has been less steady. Between 1911 and 1921, the population decreased by 39 per cent. The 1931 and 1941 Censuses showed increases of 60 per cent. and 142 per cent. respectively but from 1941 to 1951 there was a decline of slightly less than one per cent. Apart from the mining camps, there are no population nuclei in the James Bay Region. Red Lake, with a population of 1,100, is the largest centre.

Forty-five per cent. of the combined populations of the Lakehead and James Bay Regions is of British origin, and a slightly larger proportion is of other European nationalities, particularly Ukrainian and French. Nearly one-third of the native Indians and Eskimos in the Province are in the Lakehead and James Bay Regions, mostly in Kenora District. This group accounts for 7 per cent. of the population in the Region. During the last decade, the British portion has increased 2 per cent.

while the proportions of other major groups have changed by less than 1 per cent.

# Manufacturing

The Lakehead Region, and Thunder Bay District in particular, is the most important pulp and paper producing region in Ontario. It has three of the Province's nine pulp mills, eight of the nineteen pulp and paper mills, and about two-fifths of the employees.

Of the 12,900 employed in manufacturing in 1953, approximately 7,000 work in the office or mills of the eleven plants. Provincial production of newsprint in 1951 was 1,285,925 tons and of wood-pulp made for sale was 866,348 tons. The estimated annual capacity of Lakehead paper mills in 1952 was about 540,000 tons, or 40 per cent. of all Ontario's production. Similarly, these plants produced about 50 per cent. of the wood-pulp for all purposes. (Comparisons of this sort between two years are not strictly accurate, but capacity did not change much in that period.)

The three pulp mills are all in Thunder Bay District, on or near Lake Superior. These plants are: The Brompton Pulp and Paper Company (St. Lawrence Corporation) at Nipigon, with about 630 employees, which manufactures about 18,000 tons of groundwood pulp per year; The Marathon Paper Mills of Canada Limited at Marathon, with about 760 employees, producing 300 tons of bleached sulphate a day; and the Long Lac Pulp and Paper Company at Terrace Bay, with about 600 employees and a capacity of 330 tons of bleached sulphate a day.

The St. Lawrence Corporation mill at Red Rock with about 485 employees has an annual capacity of 80,000 tons of kraft board, 9,000 tons of ground-wood and 9,000 tons of unbleached sulphate pulp. Current expansion at an estimated cost of \$22 million will raise kraft board capacity to 150,000 tons, and provide 60,000 tons of newsprint.

The Dryden Paper Company at Dryden, Kenora District, also manufactures kraft pulp (15,000 tons) kraft wrapping paper (30,000 tons), and sheathing paper (15,000 tons). It employs about 450 persons. The Company is expanding its capacity to about 80,000 tons of pulp and paper, compared with the present 60,000 tons.

The Ontario-Minnesota Pulp and Paper Company has two large mills at Fort Frances (Rainy River), and Kenora (District of Kenora). The Fort Frances plant, with some 820 employees, has a capacity of 335 tons of newsprint daily, while the Kenora plant, which hires about 750, turns out 300 tons of groundwood pulp, 90 tons of sulphite pulp, and 365 tons of newsprint each working day.

The Region's four remaining paper mills are all in the Twin Cities. The Abitibi Power and Paper Company operates two plants in Port Arthur. Its newsprint plant, employing about 650, has a yearly capacity of 110,600 tons. The book paper mill operated by Abitibi's subsidiary, Provincial Paper Company, has in the neighborhood of 600 employees. Its daily capacity is about 150 tons of book and writing paper.

The Abitibi Company has a smaller newsprint mill at Fort William. Its 300 employees help in producing 63,000 tons of newsprint annually.

The Great Lakes Paper Company has the largest annual newsprint capacity in the region, 155,000 tons, and a large capacity of unbleached sulphite pulp, 60,000 tons. It is also the largest employer, with some 975 in the mill.

The Canadian Car and Foundry Company's plant was opened before 1914 to build railway cars, but it closed down during the early 1920's when the railway boom ended. During the second World War, the plant built Hurricane fighters and Curtiss dive bombers. The expansion of production required a labour force of 5,000 to 6,000. When the war ended, the company began to make buses. It was the first in the country to build them, and employs about 700 at the present time.

There are several smaller, but important, manufacturers in the city, including the Great Lakes Lumber and Shipping Company (pine and spruce lumber),

Canada Iron Foundries Limited (car wheels, from castings, pipe, boilers), Ogilvie Flour Mills Limited, and the Day Company of Canada (air and dust control equipment). There are also several machine shops and a plant producing vegetable oils.

Port Arthur, like its twin, has industries other than pulp and paper. The largest employer (about 800) is the Port Arthur Shipbuilding Company, a subsidiary of Canada Steamship Lines, which builds boilers, pulp and paper machinery, etc., in addition to its ship repair business. There is also a firm which manufactures wood preservatives and several saw mills.

The only other large plant in the Region is the Lake of the Woods Milling Company flour mill at Keewatin, with about 300 employees. There are also a large number of saw mills in the Region, most of which are small and many of which are part-time operations.

The gross value of manufacturing production in the Regions in 1950 was \$177.2 million. The Regions rank tenth in the Province and second in northern Ontario, exceeded only by the Nickel Range. Average wages and salaries in 1953 were \$68.44, slightly lower than other regions in northern Ontario but fifth highest in the Province. A study of the manufacturing employment index reveals a difference between high and low periods of employment of 13.6 per cent. during 1953, a relatively low figure in northern Ontario. This reflects the greater diversity in manufacturing industries.

# Forestry

If the 77,897 square miles of the Lakehead are added to James Bay's 135,071 square miles, the total of 212,967 square miles, is as large as France, or 58.6 per cent. of Ontario's land area. Most of this land is forested, but its value cannot be accurately assessed until the Forest Resources Inventory Reports for Fort Frances, Kenora, and Sioux Lookout are published. These correspond roughly to the political districts of Rainy River, Kenora, and northern Thunder Bay. The Forestry Reports cover very little of the James Bay Region, perhaps because of its remoteness. Published Reports deal with the Fort Arthur district (16,893 square miles), Geraldton (12,320 square miles), and White River (6,800 square miles). About one-half of the White River forestry district is in Thunder Bay, the rest in Algoma. Altogether, these three Reports deal with about 40 per cent. of the Lakehead.

The 1951 census listed 9,356 (nearly all in Thunder Bay) forestry workers, or two-fifths of Ontario's 23,030. This was 14.8 per cent. of the Lakehead's labour force, a considerable fraction compared with manufacturing which employed 20.2 per cent. However, as forestry or logging employment is extremely variable, only 63 per cent. of the Region's labour force worked 50 weeks or more in 1951, the lowest percentage of any Region except the Highlands and Lake Erie. For Ontario as a whole, the figure was 74.1 per cent.

Most of the land is Crown property (i.e. held by the Province). In the White River forestry district, 89 per cent. of the total area, and in the Port Arthur forestry district, 92 per cent. (including land grants to the old Grand Trunk Pacific Railway), is Crown land. The Geraldton district is 99 per cent. Crown land.

There is no overcutting of any species in the forestry districts for which reports have been published. Spruce in the Port Arthur district received the most attention -- 49.6 million cubic feet are cut each year out of a total allowance of 52.3 million cubic feet. For all conifers in this district the rate of cutting is three-quarters of the annual allowance. This is for Crown lands only as figures are not yet available from owners of patented (i.e. privately owned) lands. The total cut for all species is 80.5 million cubic feet compared to the allowable cut of 209.5 million cubic feet. Hardwoods (white birch, poplar) are virtually untouched. Only four per cent. of their 99.2 million cubic foot allowance is being used. This is true also in the Geraldton forestry district in which approximately one-half of the conifer allowance is used (41.5 million cubic feet out of 87.9 million cubic feet), but only six per cent. of the hardwood allowance (4.3 million cubic feet out of 72.8).

The White River district continues this pattern. Although hardwoods make up about one-half of the forests, they are not used in any quantity for pulp because better and cheaper paper can be made from the conifers. Therefore relatively

undesirable trees gradually become more common and hence even more undesirable.

# Mining

The value of mineral products from the Lakehead and James Bay Region was \$27,320,062 in 1952, 6 per cent. of Ontario's total or 7.5 per cent. of all metal mining. This considerable total is dwarfed, however, by mining operations in the Nickel Range (55.2 per cent. of all mining) and the Clay Belt area (17.5 per cent.).

The most interesting mining development in the Region is that of Steep Rock Iron Mines in Rainy River District, about 140 miles west of Fort William. This is the largest producer of iron ore in Canada, its 1952 production of 1,427,276 tons being 52.5 per cent. of Ontario's iron mining and 27.4 per cent. of Canada's.

## ONTARIO IRON ORE

	1951	1952
Steep Rock Mines Algoma Ore Properties Marmoraton Mining	1,484,996 tons 1,356,582 tons	1,427,276 tons 1,286,612 tons 3,602 tons
	<del></del>	
TOTAL	2,841,578 tons	2,717,490 tons

The mining of iron ore in the Region began in 1907 at Atikokan, a few miles from the present mine. The ore was magnetite but, unfortunately, contained large quantities of sulphur which is expensive to remove. A blast furnace was built at Port Arthur to use the ore. It smelted the 96,000 tons of ore mined in the period 1907-1911, after which the whole operation was abandoned.

Hematite ore (which is 60 per cent. iron) containing very little sulphur, was discovered at the bottom of Steep Rock Lake about 15 years ago. The company spent several years (and about \$11 million, partly privately raised, partly American government funds) damming the lake and removing water and clay, before it could make its first shipment late in 1944. This was from the famous Errington open pit which is now being converted to an underground mine. A similar drainage and dredging programme was used to open the new Hogarth open pit mine. This mine, officially opened September 2, 1953, is expected to produce a greater tonnage than the Errington open pit by 1955 while the Errington underground mine will dig 500,000 - 750,000 tons of ore a year. The company has recently leased part of its property to the Caland Ore Company (a subsidiary of Inland Steel Company of Chicago) which will spend more than \$25 million over the next five years to develop an underground mine. Total production in this area may exceed the present Canadian production by 1960, if the demand continues to rise and financing permits.

Gold in 1952 was valued at \$15,509,260 or 56.8 per cent. of the Region's mineral production. The Red Lake and Pickel Lake areas of James Bay Region provided about two-thirds of the gold while Thunder Bay District accounted for the rest. Although gold was discovered at Red Lake in 1897, and at Little Long Lac in 1908, no "rush" developed to those areas until the 1930's, perhaps because of their isolation. The production of gold (486,692 ounces in 1951, 441,856 ounces in 1952) was 17.6 per cent. of the 1952 Provincial total. The James Bay Region has had a total of 17 producing gold mines of which only seven (Campbell Red Lake, Cochenour Willans, Madsen Red Lake, Mackenzie Red Lake, New Dickenson, Pickle Crow, Starratt Olsen) were operating in December, 1953. There have been 226 other mines (mostly gold) in the district, some of which sank shafts, others made drilling tests, while no information is available for a few. Nearly all had their head offices in Toronto

Gold mining in the Thunder Bay areas of Little Long Lac, Beardmore, and Sturgeon River follows a similar pattern. Only four of the ten producing gold mines are now in operation. These are: Leitch, Little Long Lac, MacLeod-Cockshutt, and Theresa Mines. There have been eighty other mines which did not reach the production stage.

There were 3,262 miners in the Regions in 1951, but only 2,869 in 1952. About one-third of these were in the iron mines (692 employees in 1952), most of the remainder in gold. The expansion of iron mining has done little to check this downward trend, as great tonnages of ore are moved with very little labour. It must be remembered also that gold mining is almost the only industry in the James Bay Region.

One of the earliest mineral discoveries in Ontario was of silver near Port Arthur about 1847. Various discoveries in the 1850's and 1860's turned up high grade silver deposits. One of the best deposits was on Silver Islet, in Lake Superior near Thunder Cape, which was worked between 1869 and 1884. The extreme lowness and small size (about 90 feet by 90 feet) of this island made the mine subject to flooding especially during the fierce winter storms. At present, the only silver mined comes as a by-product from the gold mines.

Other minerals found are sand and gravel, granite, and peat moss used for horticultural purposes, bedding litter for animals, and fertilizer. These come largely from Thunder Bay or Rainy River.

# Agriculture

Only 3.4 per cent. of Ontario's agricultural land is situated in the enormous area of the Lakehead and James Bay Regions, which comprises 59 per cent. of the Province. By the 1951 Census, one-half of one per cent. of the total area was occupied farm land. Of this, 27 per cent. was improved land, compared to a 61 per cent. average for the Province. There were 3,785 farms in the three districts of Kenora, Rainy River and Thunder Bay, most of them in the Thunder Bay District. Five per cent. of the total labor force was engaged in agriculture.

The whole of the Lakehead and James Bay Regions is underlain by the Precambrian rocks of the Canadian Shield. The area slopes slightly to the north so that the highest part and the water divide is near its southern margin, where the general elevation is about 1,500 feet.

Most of the Lakehead Region is sandy upland cut by lakes and rivers. There are a few pockets of reasonably good agricultural land. These are in the low-land around the lakehead cities and around Upsala to the northwest, in the clay plain between Lake of the Woods and Rainy Lake, and in deposits of deep silt and clay extending north of Dryden. Mixed farming is carried on in these limited areas.

The main agricultural activity in the Thunder Bay District is the production of whole milk for the lakehead fluid milk market. Some cream, sour and sweet, is produced in the outer circle of the district, too far away for the transport of whole milk. The two lakehead cities and mining and pulp and paper towns near the limited agricultural area of the Thunder Bay District consume all the locally produced milk, eggs, dressed poultry, vegetables and small fruits. In addition, food must be imported from Western and Eastern Canada.

In the Rainy River clay plain, the climate is similar to that on the prairies rather than in the rest of northern Ontario, and therefore more conducive to agriculture. Leguminous crops grow exceptionally well. As a result, alfalfa both for hay and seed is an important crop, replacing corn for livestock feed. Canning peas have also been a remunerative cash crop. A canning factory at Emo took the peas grown in the district until it was bought out. Pea growing is now on a limited scale. Grass seeds of high quality, including alfalfa, alsike, red clover and timothy are marketed from the area.

In the vicinity of Kenora, market gardening and small fruit farming is carried on. The agricultural centre is Dryden. Some livestock and surplus grain and flax is marketed in Winnipeg.

The James Bay Region falls into three roughly equal areas - uplands to the south west with drift deeper than further north, central plains of loamy clay, sand and boulders with intervening bogs, and, following the coastline of Hudson Bay and James Bay, a low, flat, thinly covered area. The terrain and the climate in the Region make agriculture unfeasible, and all food for the community of Red Lake and the Hudson's Bay Company posts on James Bay is flown in from the south.

# VALUE OF SELECTED AGRICULTURAL PRODUCTS LAKEHEAD AND JAMES BAY REGIONS

(in thousands of dollars)

Products	Kenora (including Patricia Portion)		Thunder Bay	Lakehead & James Bay Regions	Regions as a % of Province
Field Crops - 1953 Oats Potatoes Field Roots Hay	78.4 72.0 7.1 331.0	183.3 75.6 5.3 990.0	166.3 316.8 53.5 1,186.0	428.0 464.4 65.9 2,507.0	0.9 3.7 2.4 2.7
Livestock on hand - 1953	328.4	1,324.1	1,577.8	3,230.3	0.8
Poultry on hand - 1952 Total poultry on hand	30.7	62.7	139.9	233.3	1.1

Source: Ontario Department of Agriculture

